United States
Department of
Agriculture

Forest Service

Pacific Southwest
Region

October 2002

Cave Rock Management Direction

FINAL Environmental Impact Statement

Lake Tahoe Basin Management Unit

Cave Rock view from boat launch, 1999

Cave Rock Management Plan Final Environmental Impact Statement

Prepared for:

USDA Forest Service,
LTBMU
870 Emerald Bay Road, Ste #1
South Lake Tahoe, CA 96150
Contact: John Maher
530/573-2600

Prepared by:

Jones & Stokes
2600 V Street
Sacramento, CA 95818-1914
Contact: Sheri Brown
916/737-3000

October 2002

Jones & Stokes. 2002. Cave Rock Management Plan Final Environmental Impact Statement. May. (J&S 14-446.) Sacramento, CA. Prepared for the USDA Forest Service, LTBMU. South Lake Tahoe, CA.

Contents

Tables

Page

Figures

Chapter 1
Purpose and Need for Action

1.1 Introduction

This Environmental Impact Statement (EIS) addressing the management of Cave Rock was prepared in accordance with the National Environmental Policy Act (NEPA) and is a successor to the Cave Rock Management Direction Draft Environmental Impact Statement (DEIS) issued in August 1999. The Notice of Intent (NOI) for the DEIS was filed in the Federal Register (FR)(Vol. 64, No.15; pp. 3678–3680), January 25, 1999. The deadline for public comments was March 1, 1999. Numerous comments were received during scoping of the DEIS and in response to the DEIS; these comments helped in the formulation of alternatives.

This introduction discusses the underlying need to which the U.S. Department of Agriculture Forest Service (Forest Service) is responding, the events leading up to this analysis, public involvement efforts, other public agencies and governments involved, the components of the proposal, connected actions, the significant issues this Final Environmental Impact Statement (FEIS) addresses, and the legal context for decision making.

1.2 Preferred Action

The Forest Service proposes to revise its management policy for Cave Rock (see section 2.3 for current policy), a site eligible for listing on the National Register of Historic Places (National Register) as a Traditional Cultural Property (TCP), Historic Transportation District, and archaeological site. As a result of this FEIS, the Forest Plan will be amended. The new management direction would eliminate climbing activities currently occurring at the site to protect Cave Rock's heritage resources. However, other non-invasive recreation that is consistent with the historic period including, but not limited to, hiking, picnicking, stargazing, boating, and fishing would be allowed to continue.

1.3 Purpose and Need

The proposal's purpose is to protect the Cave Rock heritage resource and regulate uses there in a manner that, consistent with mandates and restrictions of law and regulation, preserves the historic and cultural characteristics that make the property eligible for listing in the National Register. As caretaker of a property eligible for listing in the National Register, the Forest Service has a responsibility to assess and manage for the appropriateness of activities occurring at Cave Rock.

Action is needed at this time because some ongoing activities in the area have been identified as adversely affecting the integrity of the National Register-eligible properties. In addition, any long-term continuation of existing use restrictions require a NEPA decision to implement.

1.4 Background

Physical Features

Cave Rock, a remnant of a volcano that erupted over 3 million years ago, is located on the southeastern shoreline of Lake Tahoe, in Douglas County, Nevada (figure 1-1). This distinct landscape feature is sacred to members of the Washoe Tribe of Nevada and California, the native people of the Lake Tahoe Region, since time immemorial. More recently, it has become a popular rock climbing area for local, national, and international climbers.

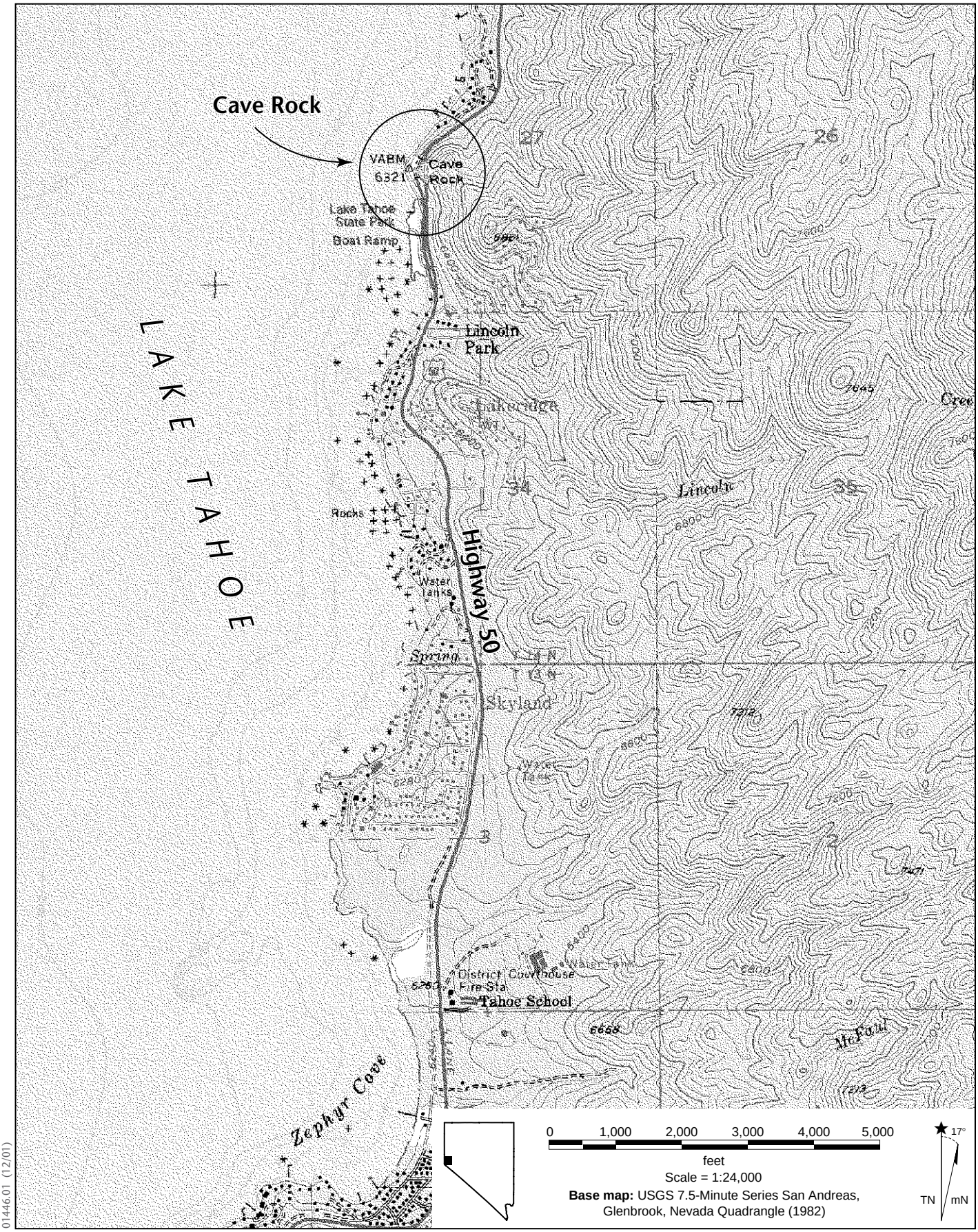
Substantial physical alterations at Cave Rock since Euroamerican settlement include: construction of roads above and around Cave Rock, two tunnels blasted through it to accommodate U.S. Highway 50, and construction of a boat launch facility at its base. There is also development of nearby (within ½-mile) urban housing subdivisions and commercial facilities.

Significance of Cave Rock

The Washoe Tribe considers Cave Rock a place of extreme power that should be avoided by all but certain Washoe doctors or traditional practitioners. The tribe officially alerted land management and regulatory agencies to the sacredness of Cave Rock and its environs in 1993, when a proposal to improve the Nevada Division of State Park's boat ramp at Cave Rock was being permitted by the Tahoe Regional Planning Agency (TRPA). However, newspaper accounts from as early as 1951 document even earlier attempts by the Washoe Tribe to have Cave Rock designated as a historic landmark and a natural memorial to the Washoe Indians (*Record Courier*, April 20, 1951, and May 11, 1951). In the 1990s, the tribe shared its concerns with other government agencies regarding threats to Cave Rock's traditional values by modern-day uses. The tribe alerted the Forest Service that rock climbing was occurring there, and that it considered such activity to be desecration of and damage to a most sacred site.

In 1996, the Forest Service determined Cave Rock eligible for inclusion on the National Register as a TCP. Cave Rock is eligible for listing because of its associations with Washoe traditions regarding the creation of a landscape central to the Washoe Indian heritage, belief, and cultural identity as well as its continued role in providing power to traditional Washoe practitioners (Rucks 1996). In addition, it was found eligible for listing as a TCP because of its association with at least two acknowledged Washoe practitioners, and for its ability to evoke ethnographic significance.

Concurrent with his 1996 National Register evaluation, Forest Supervisor Robert E. Harris, after applying the criteria of adverse effect [36 CFR 800.5 (a)(1)] determined that "technical rock climbing poses an adverse effect to the National Register eligibility of Cave Rock (Harris, letter to the Nevada SHPO dated Dec. 5, 1996). Harris noted "the installation of climbing hardware…directly affects the physical integrity of the property, and…the presence of climbers and their paraphernalia…affects the ability of the property to convey its significance and thus its integrity." These findings received the concurrence of the Nevada



01446.01 (12/01)

Figure 1-1
Project Location Map

State Historic Preservation Officer (SHPO) (Baldrica, letter dated Dec.18, 1996) and the Advisory Council on Historic Preservation (ACHP) (Gleichman, letter dated April 30, 1997).

Since then, Cave Rock has also been determined eligible for listing on the National Register as a Historic Transportation District, as well as for its archaeological resources. This Forest Service document assesses the effects on the eligible properties of all activities occurring on the National Forest at Cave Rock, including rock climbing. It considers a range of alternative management schemes for the area that define which activities are appropriate or inappropriate, respectively, on the National Forest at Cave Rock. Consequently, it will establish new management directions for the area and amend the Lake Tahoe Basin Management Unit (LTBMU) Land and Resource Management Plan (Forest Plan).

The climbing community considers Cave Rock a unique rock climbing resource because of its southwest exposure, ready access, and magnificent views. It offers the only high-level (in terms of technical difficulty and number of routes) climbing site in the Lake Tahoe region and its environs. Its year-round accessibility is unique and it is internationally renowned for its difficult overhanging routes.

Administrative Responsibilities

During the development of the Forest Plan, Cave Rock was mistakenly identified as private land and therefore not assigned a management prescription in the Roundhill Management Area. However, a 1998 title search of the original land patent revealed that Cave Rock is located on land administered by the National Forest System.

The Forest Service's LTBMU manages the actual Cave Rock formation with easements to the Nevada Department of Transportation (NDOT) for U.S. Highway 50. The State of Nevada, Douglas County, utility companies, and private parties also have ownership and easements in the Cave Rock vicinity. Underwater lands below 6,223 feet elevation are administered by the Nevada Department of Natural Resources, Division of State Lands. The boat ramp and urban subdivisions lie outside the boundaries of the historic districts. Any decision by the forest supervisor regarding Cave Rock would affect only the National Forest land, as the Forest Service has no authority over other jurisdictions.

The draft Cave Rock Management Plan from fall 1998 describes evaluations and management recommendations made by TRPA. These recommendations are considered in this analysis. Development of the TRPA Cave Rock Management Plan was a requirement of TRPA's 1993 permit to allow the improvement of the Cave Rock boat launch facility. The plan is incorporated into this document by reference (briefly described in the heritage resources section in chapter 3). It can also be reviewed in hardcopy at the Forest Service Supervisor's Office at 870 Emerald Bay Road in South Lake Tahoe.

1.5 Tiering

Tiering refers to the "coverage of general matters in broader EISs (e.g., national program or policy statements) with subsequent narrower EISs or environmental analyses (e.g., regional, basin-wide program statements, or site-specific statements) incorporating by reference the general discussions [from the programmatic EIS] and concentrating solely on the issues specific to the [subsequent project-specific action]."(40 CFR 1508.28; Bass 2001). Tiering is intended to help the lead agency to focus on the issues that are ripe for decision and exclude from consideration issues already decided or not yet ripe.

This FEIS tiers to, incorporates by reference the issues discussed, and implements the management direction found in the LTBMU Forest Plan EIS and related documents. Therefore, this FEIS focuses on the issues specific to amending the Land Management Policy for Cave Rock. Information about resources not discussed in this document may be found in the Forest Plan EIS and appendices.

1.6 Forest Service Decision-Making and Coordination with other Agencies and Governments

The Forest Service is the only federal agency involved in this decision, which will be made by the LTBMU forest supervisor. Consultation with the Nevada SHPO (NSHPO) and the ACHP is required in accordance with the National Historic Preservation Act of 1966 (NHPA) (16 USC 470 et seq.). This consultation has been extensive, is ongoing, and will be completed before the Record of Decision is signed for this undertaking.

Section 106 of the NHPA also requires agencies to take into account the effects of their actions on historic properties and to allow the ACHP to comment on those actions. Section 106 and NEPA are processes that often have parallel timeframes, the processes influencing each other. The deciding officer can't make her decision until the Section 106 process is complete, but the Section 106 process cannot be finalized until the decision is fairly well assured. This requirement will be fulfilled with this FEIS.

The United States government has a unique legal relationship with federally recognized American Indian tribes, such as the Washoe Tribe of Nevada and California. The elected governments of these tribes are considered sovereign governments. Therefore, at Lake Tahoe, the Forest Service's LTBMU forest supervisor interacts on a government-to-government basis with the elected officials of the Washoe Tribe. Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments,* and other executive direction and congressional legislation guides the government-to-government interaction between the U.S. government and federally recognized tribes, and directs consultation with tribal governments prior to taking actions that affect federally recognized tribes. In addition, consultation required under the NHPA and NEPA have involved individuals including Washoe traditional spiritual and cultural leaders who are not elected officials.

1.7 Project Components

To accomplish the purpose and need of the project, the Forest Service proposes to implement a new management direction, described below and detailed in chapter 2, over approximately 20 acres in the Cave Rock vicinity. Specifically, new management direction would apply to the part of Douglas County, Nevada, that is eligible for listing on the National Register as part of any of the proposed Cave Rock historic districts.

The analysis area was studied between 1996 and 1998 to enable the decision-maker to consider ongoing recreational and other activities, community values and uses, traditional Washoe tribal uses and beliefs regarding the site, and heritage resource values. This document analyzes the environmental consequences of alternative management strategies to meet the purpose and need. The range of alternatives considered includes some or all of the management actions and management restrictions described below:

- Regulate rock climbing: This would range from unrestricted activity (installation and route development, route maintenance, use of uncamouflaged gear, climbing at any hour of the day or night); limited activity (removal of some routes, limitations upon the development of new routes, maintenance of existing routes, use of camouflaged equipment only, no climbing during certain hours); to total restriction or elimination.
- Remove climbing-routes: This would include the removal of some or all fixed anchors that define certain routes.
- Prohibit physical effects to the rock formation.
- Prohibit modern permanent technology.
- Restrict access: This would range from unlimited public access to access only by traditional practitioners of the Washoe Tribe.
- Remove or retain existing masonry floor.
- Remove or retain all or part of the existing graffiti.

1.8 Reasonably Foreseeable Future Actions

In assessing environmental consequences, the Forest Service considers the cumulative effects of the proposal. Such effects result from the incremental effect of the proposal when added to other past, present, and reasonably foreseeable future actions regardless of who takes the other action (40 CFR 1508.7). NEPA does not require the evaluation of activities that are too speculative for evaluation; consequently, undescribed/unknown activities cannot be considered reasonably foreseeable.

Past and present human activities at Cave Rock and its vicinity are described at length in chapter 3 and can be summarized as follows:

- aircraft overflight,
- archaeological and biological study/research,
- boating and boat launching,
- climbing,
- college class instruction,
- cross-country skiing,
- driving and parking
- fishing,
- hiking and fitness,
- law enforcement,
- monitoring and maintenance,
- mountain biking,
- Native American and other spiritual uses,
- picnicking,

- private urban residential and commercial uses,
- rescues,
- scuba diving,
- skateboarding,
- snowshoeing,
- socializing and partying, and,
- utility easements/lines and their maintenance,

Reasonably foreseeable future actions are inherently more difficult to describe. The LTBMU Forest Supervisor met with representatives from NDOT, TRPA, Nevada SHPO, and the Nevada Division of Parks and Recreation in the fall of 1998 to ascertain whether any of those agencies had planning considerations for the Cave Rock area. No project proposals were raised at that time. However, two potential actions in the Cave Rock vicinity that have been publicly discussed are described below. Neither is reasonably foreseeable because they are not sufficiently definite:

1. Cave Rock segment of the around-the-lake bike trail: The TRPA has long-championed the creation of a bike trail encircling Lake Tahoe. At Cave Rock, the TRPA Bicycle Master Plan for the Lake Tahoe region envisions installation of a separate, Class I bike trail using the Johnson's Cut-Off Road over Cave Rock. This proposal is not considered reasonably foreseeable because no agency has begun the project-specific environmental documentation required to bring such a project to fruition.
2. Cave Rock tunnel extension and erosion control project: NDOT's Erosion Control Master Plan for Highway 50 is currently in the planning stage. Julie Pierko of NDOT indicated that this project is not currently being considered for analysis in the foreseeable future (Pierko, pers. comm., March 12, 2002)

During the scoping period for this EIS and in the draft TRPA Cave Rock Management Plan, concerns were raised that the continuation of sport climbing at Cave Rock could lead to the practice of other extreme sports in the area. These comments did not describe the kinds of activities anticipated. It is not possible to assess speculation; consequently, undescribed/unknown activities cannot be considered reasonably foreseeable.

No proposals have been received by the Forest Service to develop any of the currently undeveloped easement rights found in deeds in the parcels near Cave Rock.

The forest supervisor's scoping letter for this EIS identified additional actions, which do not require a NEPA decision to implement, to mitigate some of the effects of human activity at the Cave Rock TCP. These actions are described in section 2.6, under "Components Common to All Alternatives." In addition to these actions proposed by the Forest Service, ongoing activities on other land management jurisdictions within the proposed historic district boundaries are expected to continue. Specifically, NDOT's highway uses will continue to be the dominant visual and auditory element in the Cave Rock vicinity. While the TRPA Cave Rock Management Plan recommends cessation of recreation use (boating, scuba) in the underwater portion of the management district, to date there are no proposals to limit such use. (Current boating regulations mandate a "no-wake" zone within 600 feet of the shoreline.) Year-round availability and use of the Cave Rock boat launch will continue under Nevada State Parks management.

1.9 Issues to be Considered

Chapter 4 of this FEIS documents the public involvement and scoping process. The many issues identified were considered in formulating and understanding the consequences of implementing the alternatives. The following is a summary of the significant issues:

- *Issue 1 – Cave Rock as Sacred Site.* Is Cave Rock, as a sacred site to the Washoe Tribe, defaced and devalued by sport climbing and other activities that physically alter the rock formation? Is the Washoe Tribe excluded from traditional practice at Cave Rock by activities such as sport climbing at Cave Rock?
- *Issue 2 – Privacy.* Should Cave Rock be managed exclusively for the use by Washoe spiritual leaders?
- *Issue 3 – Cultural and Historic Resources.* Should the values that make Cave Rock eligible to the National Register as a TCP, historic transportation district, and archaeological site be protected from activities that adversely affect these attributes?
- *Issue 4 – Land Ownership.* Should Cave Rock be returned to the Washoe Tribe to enable their reconnection with and stewardship of the land they lost?
- *Issue 5 – Climbing*. How should the rights of climbers to use public lands be reconciled with the values of the American Indians? Should all climbing be eliminated?

1.10 Applicable Laws and Policy

This document adheres to the following mandates of law and policy:

U.S. Constitution, First Amendment. December 15, 1791*: "Congress shall make no law respecting the establishment of religion or prohibiting the free exercise thereof."* The First Amendment forbids the government from acting in a manner which would endorse the beliefs and strictures of any one religion above those of others.

National Historic Preservation Act of October 15, 1966 (16 USC, Section 470W(6)): This act declares a national policy of historic preservation (including identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance, research, interpretation, conservation, and education and training regarding the foregoing activities, or any combination of the foregoing activities (16 USC, Section 470W(8)). Section 106 of the NHPA provides procedures for federal agencies to follow in the event a proposal may affect a property on, or eligible for, the National Register. Section 106 requires government agencies to take into account the effects of their actions on historic properties and allow the ACHP a reasonable opportunity to comment on such actions. The law does not require that effects on historic places be avoided; rather, they must be considered in planning.

With specific regard to Indian tribes, the NHPA affords tribal members the opportunity to participate when an undertaking may affect properties of historic value to an Indian tribe on non-Indian lands. In addition, agencies must seek information from tribes likely to have knowledge or concerns about historic properties in the area.

American Indian Religious Freedom Act of August 11, 1978 (PL 95-341, 92 Stat. 469, 42 USC 1996): This Act recognizes the importance of traditional Indian spiritual practices and directs all federal agencies to ensure that their policies will not abridge the free exercise of Indian religions. It declares a federal policy of protecting and preserving the right of American Indians to believe, express, and exercise their traditional religions, such as access to sites, use and possession of sacred objects, and the freedom to worship through ceremonies and traditional rights. This statute has no specific implementing regulations or mandates of exclusive use.

Archeological Resources Protection Act of 1979 (16 USC, Section 470aa et seq): This act prohibits the unauthorized excavation, removal, or damage of archaeological resources on federal and Indian lands.

Endangered Species Act of 1973 (87 Stat. 884 as amended; 16 USC 1531): This act describes the process for determining endangered and threatened species, establishes prohibited acts, prescribes penalties, mandates a recovery plan, and defines interagency and state cooperative relationship requirements.

National Forest Management Act of October 22, 1976 (PL 94-588, 90 Stat. 2949; 16 USC 472 et seq.): The National Forest Management Act's (NFMA's) implementing regulations provide for coordination of regional and forest planning with equivalent related planning efforts of other federal, state, and local agencies and Indian tribes. It reinforces the importance of recreation in forest planning, stating that the forest plans "shall provide for multiple-use, sustained yield, and the coordination of recreation with other resources" (16 USC, Section 1604(e)(1)). The LTBMU has a forest plan that establishes a programmatic framework specifically for managing National Forest lands within Lake Tahoe's watershed. It sets general and specific goals for this management, and establishes standards and guidelines to follow in pursuit of these goals. The desired condition of the forest and its resources described in the forest plan set the stage for site-specific project planning. All projects must be consistent with the forest plan, as required by the NFMA.

Organic Administration Act of 1897 (16 USC 551): This act gives the Forest Service the authority to manage and regulate use of National Forest System lands.

Multiple-Use Sustained-Yield Act of 1960 (PL 86-517, 74 Stat. 215; 16 USC 528, 528–531): This act sets a Congressional policy that National Forests be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. It directs that forest resources be utilized in the combination that will best meet the needs of the American people. Allows for some of the land to be used for less than all of the resources.

Executive Order 13007, *Indian Sacred Sites* (May 24, 1996): Agencies shall accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sites. These goals shall be furthered to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions.

Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments* (November 6, 2000): Establishes regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, strengthens the United States government-to-government relationship with Indian tribes, and reduces the imposition of unfounded mandates upon Indian tribes.

Chapter 2
Alternatives Including the Proposed Action

2.1 Introduction

This chapter presents the alternative management schemes for the analysis area. It contains seven parts: (1) introduction; (2) a description of the Forest Plan management direction important to shaping the project's desired conditions; (3) a description of the LTBMU proposed management direction for Cave Rock; (4) a description of how the alternatives were formulated; (5) a description of the alternatives considered but eliminated from detailed study; (6) a description of each alternative, including the proposed action, to be considered in detail; and (7) a comparison of the alternatives.

2.2 LTBMU Management Direction

The Forest Plan, which is incorporated by reference, and its accompanying EIS provide information at a broad, forest-wide scale and at a more site-specific Management Area scale. These documents may be referred to if more information is needed than is found in this project-level document. In the Forest Plan, management direction is provided through management goals, objectives, and practices and prescriptions.

Forest Plan Management Goals

Goals describe the desired future conditions that are expected as a result of implementing the Forest Plan. Highlights of goals and predicted conditions important to shaping the project's desired conditions follow.

Law Enforcement Goal

Provide information on laws and regulations to the public; establish enforcement practices to prevent violations of federal statutes; protect the environment, life and property; and recover compensation due the government.

Law Enforcement Predicted Condition – This activity will continue to require more emphasis as population and visitor use increase in the basin. Demand for use of the forest resources will contribute to the problem since it will exceed that which is available. Prevention of violations will be emphasized.

Historical and Cultural Resource Goal

Protect our historical and cultural heritage. In addition, Section III of the Forest Plan states that "[c]urrent and future management goals for historical and cultural resources include the need to improve the public's awareness of and appreciation for Tahoe's cultural heritage." This can be achieved "through interpretation of the Tallac Historic Site and assistance to the Washoe Tribal Council with their effort to reestablish their traditional cultural ties within the Lake Tahoe Basin."

Historical and Cultural Resources Predicted Condition – Significant examples of the history and prehistory of the Lake Tahoe area will be preserved. Residual evidence of past social and economic uses of National Forest lands will be located and documented, and some past activities will be interpreted or recreated to provide for better knowledge of and appreciation for the cultural heritage of the basin.

Recreation Goal

Provide opportunities for enjoying a variety of outdoor recreation experiences.

Recreation Predicted Condition – Recreation use will increase. An expanding population of residents and visitors in the basin will also add to the amount of dispersed recreation use without additions to facilities. Opportunities for dispersed recreation will be increased. New improvements such as trails, trailhead parking, and other features will help people enjoy the forest. Current interpretive programs will be expanded.

Forest Plan Management Objectives

Management objectives are described as average annual outputs (Forest Plan pages IV-12 to 13). The achievement or production of these outputs are one indicator of how implementation of the Forest Plan is proceeding. The Forest Plan does not assign or predict specific annual outputs to Cave Rock.

Forest Plan Management Practices

Management Practices are the activities that can be conducted to implement the Forest Plan (Forest Plan IV-15). How these practices are to be implemented is governed in part by Standards and Guidelines. "Dispersed Recreation Management" is an example of a practice. The Forest Plan describes 57 practices.

The Forest Plan (page IV-18) includes a "General Management Practice" that addresses resolving conflicts that sometimes arise between resource areas during plan implementation. It states that "*In resolving conflicts, the following list of resources or uses are in order of priority and will normally apply*:"

a. Highest priority will be given to the protection of water quality and the enhancement of the clarity of water in Lake Tahoe.

b. Protection of threatened and endangered species native to the area;

c. Preservation of cultural resources determined or believed to be of significance;

d. Achievement of air quality standards for health, and visibility, and to prevent the adverse impacts of atmospheric deposition upon water quality;

e. Maintenance of viable populations of wildlife;

f. Achievement of diverse vegetation communities;

g. Establishment of a variety of outdoor recreation facilities and uses at a level that assures a "fair share" of the basin capacity;

h. Harvesting and treatment of timber stands to maintain health and diversity of the vegetation and to provide for the safety of people and property;

i. Lowest priority will be given to forage grazing.

Management Practice 10 addresses Cultural Resources Management (Forest Plan IV-24). It concerns *"actions to preserve historical cultural or archaeological values. The primary purpose is to prevent the loss of these socially and scientifically important values. Included are…the protection and enhancement of significant cultural resources."*

This management practice is supported by cultural resource management standards and guidelines. The Forest Plan specifies enhancement of cultural resources through scientific study and interpretation of their significant values to increase public education and enjoyment; avoidance and/or protection of Native American religious or burial sites; and reestablishment of traditional ties to Lake Tahoe by the Washoe Tribe.

The only specific management direction in the Forest Plan pertaining to rock climbing is found in the Nonstructural Wildlife Habitat Management Practice, which directs seasonal closures for rock climbing for cliffs used by peregrine falcons. There are no such closures in place, or currently needed, on the LTBMU.

Forest Plan Management Prescriptions

Specific areas covered by the Forest Plan are also assigned management prescriptions (Forest Plan p.IV-46). Forest Plan table IV shows which practices are allowed or prohibited within each prescription (p. IV-52/53).

Tribal Relations

In addition to management direction found in the Forest Plan, the LTBMU also has a tribal relations program to collaborate with the Washoe Tribe on a government-to-government basis. This relationship recognizes the tribe as a sovereign entity and acknowledges that maintenance of tribal culture and identity is important to effectuating tribal sovereignty. A 1997 Memorandum of Understanding (MOU) between the LTBMU and the Washoe Tribe states that the tribe will be included whenever possible in forest resource management programs and the LTBMU will seek the tribe's input in its stewardship activities.

The NFMA's implementing regulations provide for coordination with Indian tribes and consider actions of their land use plans and policies in forest planning (36 CFR 219.7).

The TRPA Cave Rock Management Plan cited the Washoe Tribe Comprehensive Land Use Plan's (Washoe Tribal Council 1994) goal of reestablishing a Washoe presence within the Lake Tahoe Basin and revitalizing Washoe heritage and cultural knowledge. Cave Rock is named in the plan as a specific resource issue: *"...Very recently, the Forest Service has acknowledged ownership of Cave Rock, which opens an opportunity for greater enforcement and perhaps conveyance back to the Tribe for protection."* In addition, its Policy Three states: *"The sacredness of Cave Rock at Lake Tahoe will be protected by returning the rock to Washoe ownership and elimination of disruptive and destructive activities in the vicinity"* (LSA 1998:15). Refer to section 2.5 of this FEIS for a discussion regarding the topic of land transfer of Cave Rock to the Washoe Tribe.

2.3 Proposed Management Direction for Cave Rock

The Forest Plan divides the LTBMU into 21 contiguous management areas (MAs). In addition to Forestwide management direction, more site-specific direction is provided for each MA. Cave Rock is located on the boundary of the Genoa Management Area. Cave Rock was not identified as National Forest when the Forest Plan was approved in 1988. Therefore, the Forest Plan management area direction did not address Cave Rock directly. Because the Forest Service land adjustment program is active, the Forest Service has a normal protocol to apply when lands are added to the National Forest system. That protocol states that lands not accounted for when the Forest Plan was drafted should be assigned to the nearby MA prescription, assuming the prescription is appropriate. Therefore, Cave Rock would be assigned to the Genoa MA.

The prescription most appropriate for management of Cave Rock is Prescription 3 – "Unroaded Recreation." This prescription maintains a natural forest setting for dispersed recreation, wildlife habitat and watershed protection.

Practice 10–Cultural Resource Management (Forest Plan p. IV-24) includes: "Actions to preserve historical cultural or archaeological values. The primary purpose is to prevent the loss of these socially and scientifically important values. Included are…the protection and enhancement of significant cultural resources.". This is one of the few practices that is allowed in every prescription.

2.4 Alternative Formulation

NEPA requires federal agencies to consider a range of reasonable alternatives before making decisions that could have environmental impacts. It obliges agencies to study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of resources. Issues—points of contention—raised by the public helped to shape the range of alternatives considered here.

The DEIS described five alternatives including a No Action/No Project alternative. Subsequently the Forest Service has reconsidered the proposed action presented in the DEIS and a new alternative was developed for the FEIS. This new alternative, Alternative 6, is a combination of Alternatives 3, 4, and 5 in the DEIS and is the new proposed action. Alternative 6 proposes to eliminate rock climbing immediately to protect heritage resources. Other recreational activities consistent with the historic period at Cave Rock (i.e., prehistoric times through 1965) will be allowed.

In order to incorporate Alternative 6 some of the themes of the previous alternatives were renamed, however their numbers and content remain the same. The six alternatives, showing their original and revised names, are listed in table 2.1, below.

Table 2-1 Theme Title Crosswalk of the Six Alternatives

Alternative Number	Theme Title in the DEIS	Theme Title in the FEIS
Alternative 1	No Action/No Project	No Action/No Project
Alternative 2	Proposed Action	Manage Sport Climbing to Reduce Effects on Cave Rock TCP (Previous Proposed Action)
Alternative 3	Prohibit Sport Climbing and Other Forms of Recreation that Physically Effect Cave Rock	Phase-out Sport Climbing Over 6-Year Period
Alternative 4	Exclusive Washoe Use	Exclusive Washoe Use
Alternative 5	Maximum Protection of Heritage Resources	Phase-out Sport Climbing over 3-Year Period
Alternative 6		Maximum Immediate Protection of Heritage Resources (Proposed Action)

2.5 Alternatives Considered, but Eliminated from Detailed Study

Alternatives that are illegal, fail to meet the purpose and need, are technologically infeasible or unreasonable, or cannot be implemented may be eliminated from detailed study. Alternatives eliminated from detailed study in this FEIS include:

Theme: Limit Technological or Mechanical Equipment – *Limit visitation to National Forest lands at Cave Rock to pedestrians who approach without technological or mechanical aids, with the exception of fishing poles, binoculars, or cameras.*

This alternative will not be considered in detail because there is not adequate justification that these restrictions have a relationship to the intent to protect or enhance the historic properties. The term "technological or mechanical aids" could be interpreted to extremes, such as not allowing prescription glasses or modern hiking boots. It appears that the exceptions listed by the respondent were included because they cannot physically affect the rock. (The Forest Service attempted to contact the commenter to obtain clarification, but the phone call was not returned.) If this is the case, the list of exceptions could be expanded, and Alternative 3 does this. Alternative 3 incorporates the concept described by prohibiting recreation activities that physically affect the rock.

Theme: Direct Land Transfer to the Washoe Tribe – *Transfer the land at Cave Rock from federal ownership to the Washoe Tribe.*

This alternative will not be considered in detail because the Forest Service does not have the legal authority to directly transfer federal land to an Indian tribe, nor does the agency have authority to transfer title to the Department of the Interior to be held in trust for the tribe. Congressional action would be needed for the Forest Service to transfer lands under its jurisdiction to other federal agencies or to the tribe directly.

Theme: Washoe Tribal Management of Cave Rock – *Transfer the land management authority at Cave Rock from the Forest Service to the Washoe Tribe through the use of a Cooperative Agreement or other instrument.*

This alternative was dismissed from detailed consideration because there is no statute or regulation under which the Forest Service can transfer land management jurisdiction over National Forest System lands to the Washoe Tribe. While the agency has the authority to issue special-use permits, such as the Washoe tribe has for Meeks Bay Resort, such permits do not transfer land management authority for the area in question. In the case of Meeks Bay Resort, the tribe has control of day-to-day operations authorized under the permit. However, it is the Forest Service that has the management authority to determine what is allowed under the permit. Authority to manage the land has not been transferred.

Theme: Limited Public Access – *Voluntarily or mandatorily prohibit all activities under Forest Service jurisdiction, other than Washoe spiritual uses, during specific time periods.*

This alternative was dismissed from detailed consideration because members of the Washoe Tribe who attended Forest Service collaboration meetings indicated that practitioners cannot follow a predictable schedule in knowing when the power that Cave Rock provides will be needed. Consequently, it was indicated by tribal participants at the meetings that this alternative would not meet the needs of the traditional tribal users; consequently, to implement it would unnecessarily restrict public access without benefiting the group for which the regulation was being established.

Theme: Climber Registration – *Require climbers to receive education materials before going to Cave Rock through registering with the Forest Service.*

This alternative was dismissed from detailed consideration because there are less costly and bureaucratic ways to disseminate education materials.

Theme: Create Another Climbing Site – *Develop a natural or man-created climbing site that rivals Cave Rock, and then close Cave Rock to climbing.*

Climbers who attended Forest Service collaboration meetings indicated that Cave Rock is such a spectacular natural occurrence it will be next to impossible to recreate in terms of setting, seasonality, and challenge. Thus, this alternative is technologically infeasible and not within the Forest Service's mission.

2.6 Alternatives Considered in Detail

Components Common to All Action Alternatives (Alternatives 2–6)

The forest supervisor's scoping letter for this EIS identified additional actions, which do not require a NEPA decision to implement, to mitigate some of the effects of human activity at the Cave Rock TCP.

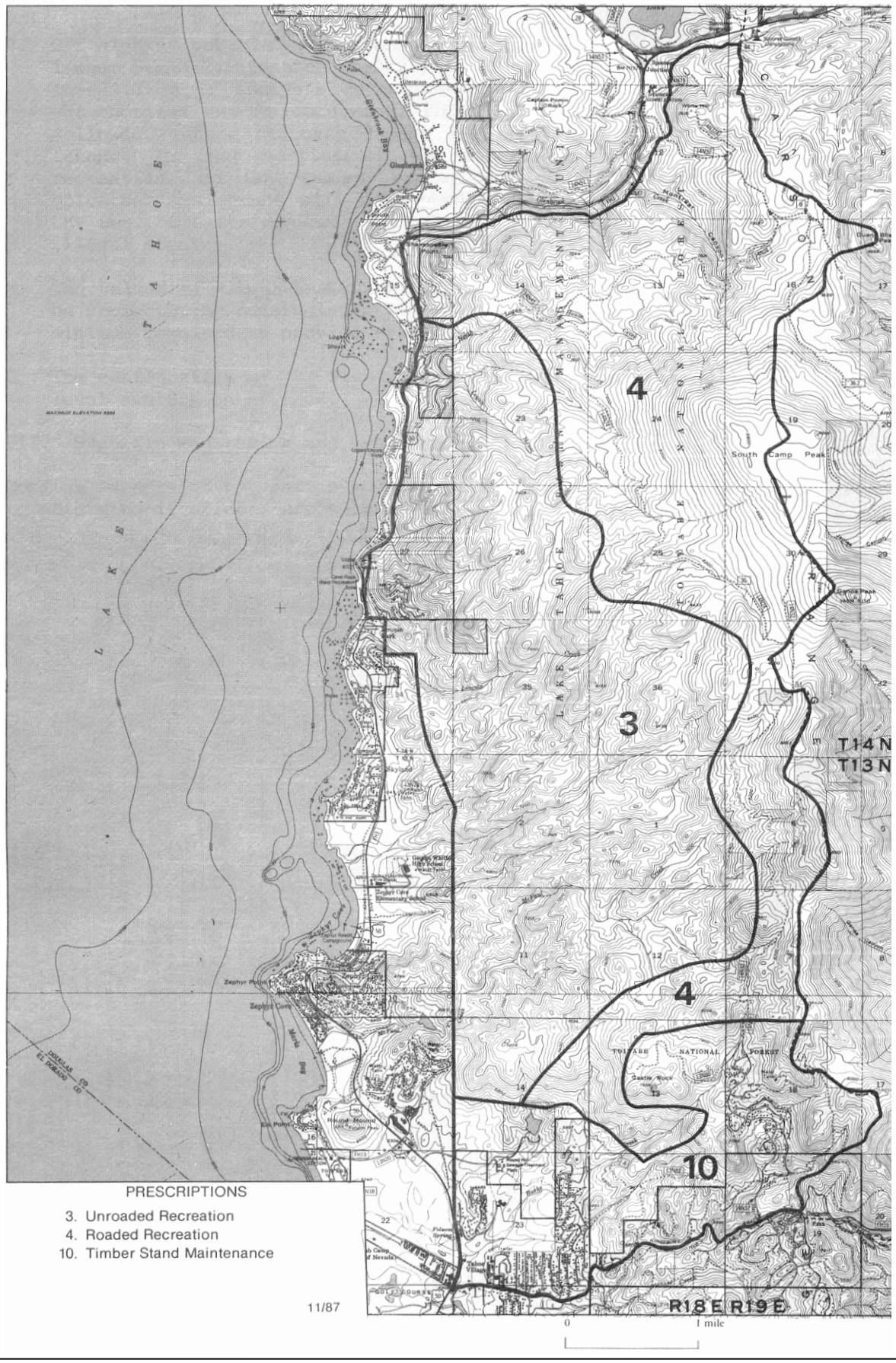
- A Cave Rock education program will be developed, including a signage component and a brochure, designed to inform people of the cultural significance of Cave Rock, as well as other information.
- The Forest Service, in cooperation with interested members of the public who choose to participate, will monitor the management situation at Cave Rock to ensure that unanticipated effects do not occur as a result of the education program. For example, if visitation increases instead of decreases, monitoring should reveal that fact and enable the Forest Service to reassess the program. New or newly identified activities not specifically addressed in the proposed management direction and believed by the Forest Service to have an effect on the TCP or other historic districts will trigger additional NHPA compliance and/or environmental analysis.
- The Forest Service will contact all holders of easements within the historic districts and provide them with the Cave Rock educational materials so that they can be informed regarding the area's special status as they exercise their deeded easement rights.

LTBMU's Land and Resource Management Plan's (LTBMU Forest Plan's) Genoa MA will be amended. This amendment would be considered *nonsignificant* pursuant to the NFMA implementing regulations. National Forest lands at Cave Rock would be managed using the Unroaded Recreation management prescription (Prescription 3) (see figure 2-1.) This prescription seeks to maintain a natural forest setting for dispersed recreation, wildlife habitat and watershed protection. Commercial activities will not be authorized within the Cave Rock TCP.

Explanation of the Historic Period

The historic period is typically defined as the time up to 50 years before the present, i.e., all events, objects, and places older than 50 years fall under the historical period. Therefore, for this Cave Rock FEIS, the historical period is the time until 1952 (50 years prior to 2002). Section 106 of the NHPA recommends also analyzing events, objects, and places that fall within the subsequent 5 years because these things will soon also technically be "historic." The historic period of Cave Rock can be broken into four components:

- Period of mythological characters;
- Period of unnamed Washoe doctors;
- Period of Welewkushkush, European contact, and early road building; and
- Period of Henry Rupert and modern transportation.



01446.01 (12/01)

Figure 2-1
Proposed Cave Rock Management Direction for Forest Plan-Genoa Management Area Amendment

The Forest Service could choose to manage for achieving the condition of any one or combination of these periods. Figure 2-2 shows the Forest Service's "management periods" in relation to the project alternatives and to the historic period. Management periods represent the conditions present up to a certain date (e.g. 1848, the beginning of European encroachment.) The alternatives would manage for the maintenance or restoration of those conditions—currently existing conditions that were not present during a given management period would not be allowed under the corresponding alternative.

The period for which the Forest Service has elected to manage to through the preferred alternative has been defined as prehistoric times through 1965, the year of Henry Rupert's death. Henry Rupert was a Washoe traditional doctor whose association with Cave Rock contributed to its National Register eligibility. He is the subject of the only published ethnography of a Washoe doctor, "The Development of a Washoe Shaman" (Hendleman 1967). In the world of anthropology he is one of the most influential of the Washoe consultants, and the most widely acclaimed and acknowledged of their traditional doctors. His fame and influence as a Washoe doctor crossed cultural and ethnic boundaries as he continued throughout his life to incorporate and synthesize new traditions into his own form of healing. He exemplified the tension Native traditional practitioners maintain between tradition, experimentation, and innovation (Handelman 1967). The reason for selecting 1965 versus 1952 plus 5 years (e.g., 1957) was to include the entire lifespan of Henry Rupert and the construction of the second tunnel.

The historic period should not be confused with the period of significance, which extends through the present time. Because Cave Rock is considered a TCP, by definition it is still relevant and significant to the Washoe Tribe today and is actively used by the Washoe in their traditional practices.

Alternative 1

No Action/No Project

This alternative is required by NEPA to be addressed in every EIS. It would allow continuation of existing management direction at Cave Rock. The types of activities conducted on Cave Rock in recent years would continue without Forest Service interference or regulation. Climbing would be allowed without restriction. New bolting and route installation would be permitted. Existing routes can be maintained without any specific permission from Forest Service. All other current users will continue to use the area, including Washoe traditional practitioners.

Alternative 2

Theme: Manage Sport Climbing to Reduce Effects on Cave Rock TCP (Previous Preferred Alternative)

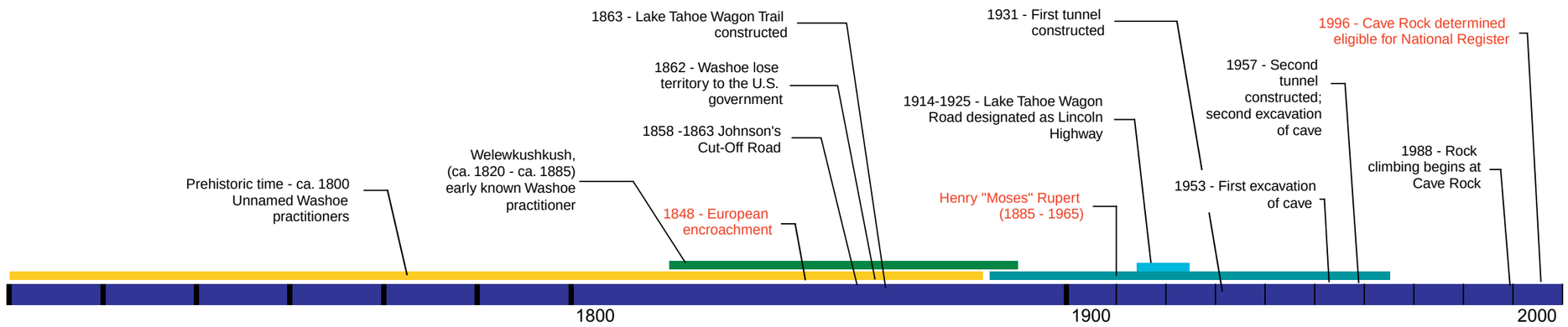
This alternative would allow public access, including rock climbing, on the National Forest at Cave Rock. However, climbing would be managed to reduce the current level of use by reducing the number of climbing routes. Some of the activities proposed are required to achieve a baseline that would enable the new management direction to be effective. Conflicts and effects on the TCP and other cultural and natural resources in the vicinity would be reduced as follows:

- Allow only nonmotorized recreation activities outside the highway easement.
- Allow installation of improvements, such as parking, sanitation, or access facilities, only for resource protection purposes, not for user comfort and convenience. (No such facilities are needed or proposed for development on the National Forest in the Cave Rock area at this time.)
- Manage rock climbing in a manner that reduces the level of its effect on the Cave Rock TCP from that identified when the TCP was initially determined eligible to the National Register (1996). All modern graffiti, historic graffiti that does not contribute to historic districts, and constructed rock and concrete improvements within the cave and at the cave entrance will be removed at the direction of the Forest Service archaeologist, in cooperation with designated representatives of the Washoe Tribe, where doing so does not physically damage Cave Rock.
- Prohibit installation of new climbing routes requiring placement of additional fixed anchors left in the rock. Prohibit climbing using artificial light.
- Eliminate existing routes when they are no longer used and where they may cause a rock to fall on the road. Accept the assistance offered by local climbers at the 1998 collaboration meetings, or hire climbers, or use Forest Service staffers who are experienced climbers to remove the routes. The initial program of route removal includes: (1) all routes to the left (north) of "Bonecrusher," including the route which traverses over the top of southbound Highway 50's tunnel and "Acapulco," (2) "Trash Dog," (3) "Ton of Bricks," and (4) any other bolts to the right of "Asylum" in the friable rock above Highway 50 (see figure 2-3). The rappel anchors at the top of the first pitch of "Trash Dog" should be retained, as they are used to complete the route "Pipeline." Rappel anchors needed to remove the above-described fixed anchors will also be retained.
- Work with the climbing community to camouflage existing brightly colored slings and shiny carabiners to blend with the natural colors of the rock. Encourage climbers to replace this equipment as routes are used and during voluntary efforts towards this purpose. If brightly colored slings remain after 6 months following the official adoption of this new management direction, it will be an indicator that the routes are not being used and the routes will be removed. Accept the assistance offered by local climbers, or hire climbers, or use Forest Service staffers who are experienced climbers to accomplish the removal.

Bolts and other fixed anchors may only be removed and replaced as part of route maintenance activities. In the interest of climber safety, the Forest Service will work with the climbing community and Washoe Tribe representatives regarding development of route maintenance guidelines. When climbers notice that a bolt or other fixed anchor has become unsafe, they must submit a written plan to the Forest Service requesting permission to replace the fixed anchor. The request must include a plan for replacement, detailing the route and location of equipment to be replaced, the type of equipment to be replaced and proposed replacement equipment (e.g., replace existing shiny bolt with a powder-coated bolt), and an explanation of the method of replacement. The Forest Service then assesses whether the proposal uses the appropriate technology to camouflage equipment, and will either accept the proposal as described or make recommendations to the requestor before granting permission to replace it. The agency will recognize climber expertise related to technology regarding climber safety.

In addition to these measures, baseline data about the activities and visitors at Cave Rock will be gathered through a system of voluntary registration, which will also facilitate the dissemination of education materials.

Thus, under Alternative 2, most existing routes may be climbed. However, no new bolt installation or creation of new routes would be permitted. Maintenance of existing routes by climbers would be



Management period for each alternative

KEY

- Alt 1 - present
- Alt 2 - up to 1996
- Alt 3 - up to 1965
- Alt 4 - up to 1848
- Alt 5 - up to 1965
- Alt 6 - up to 1965

Note: Management periods represent the conditions present up to a certain date (e.g. 1848, the beginning of European encroachment.) The alternatives would manage for the maintenance or restoration of those conditions. Currently existing conditions that were not present during a given management period would not be allowed under the corresponding alternative.

1446.01 (05/02)

Figure 2-2
Cave Rock Timeline and Management Period for Each Alternative

conducted only with prior permission of the Forest Service. No climbing using artificial light would be permitted.

Alternative 3

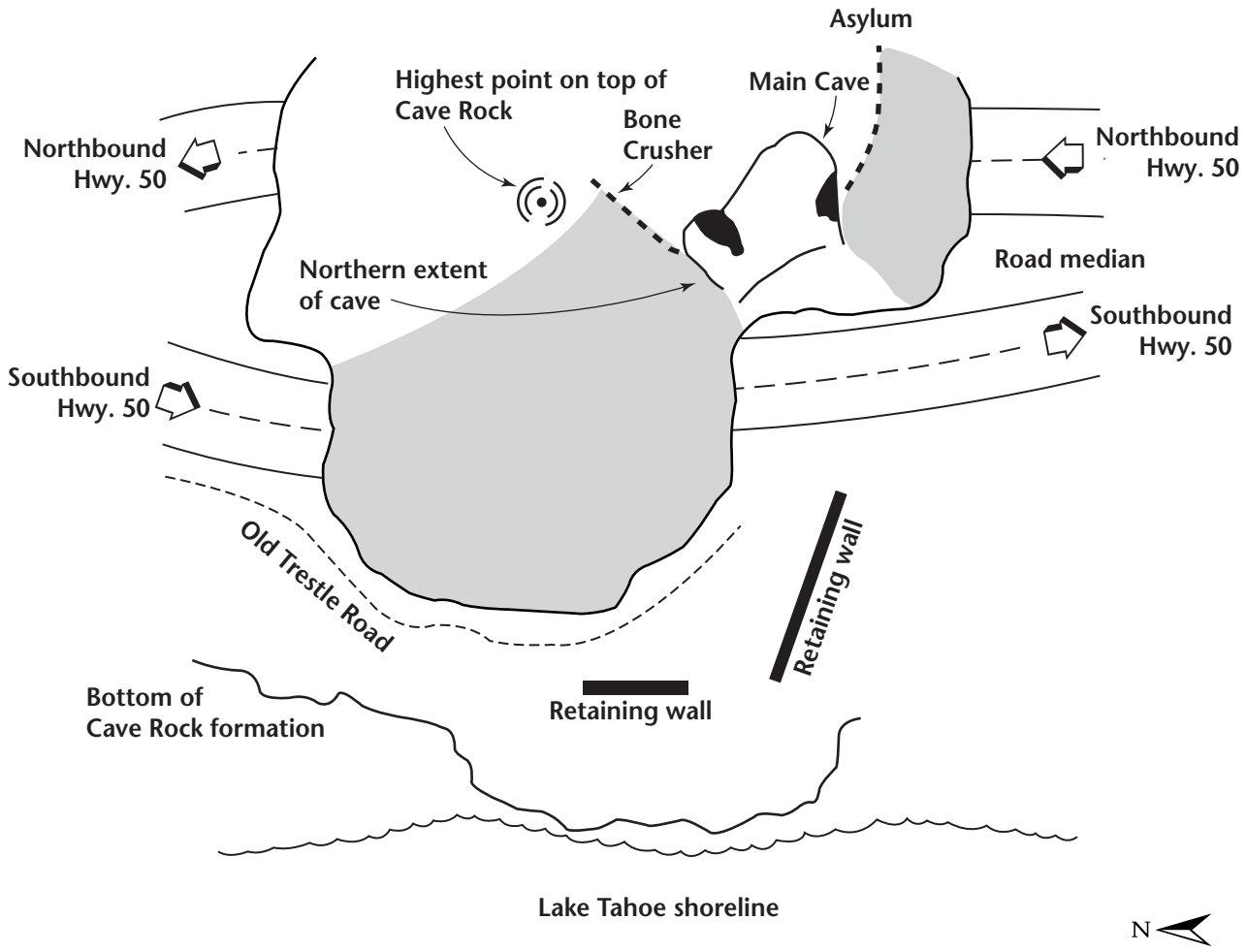
Theme: Phase Out Sport Climbing over 6-Year Period

This alternative would prohibit sport climbers from using Cave Rock, over a phase-out period of 6 years. Their climbing equipment at Cave Rock would be removed in stages, approximately 50 bolts a year would be removed, and the holes left by removed bolts would be filled. Accept the assistance offered by local climbers at the 1998 collaboration meetings, or hire climbers, or use Forest Service staffers who are experienced climbers to remove the routes. Allow climbing to continue at Cave Rock when it can be done without use of permanent technical equipment (e.g., fixed anchors). Prohibit the introduction of modern, permanent technological improvements associated with recreation uses that physically affect Cave Rock.

Manage recreation in a manner that prohibits lasting physical effects on Cave Rock. Public Access, including traditional rock climbing, is allowed on the National Forest at Cave Rock. Some of the activities proposed below are required to achieve a baseline that will enable the new management direction to be effective. Manage the Cave Rock area to reduce conflicts and effects on the TCP and other cultural and natural resources in the vicinity as follows:

- Allow only nonmotorized recreation activities outside the highway easement.
- Allow installation of improvements, such as parking, sanitation, or access facilities, only for resource protection purposes, not for user comfort and convenience. (No such facilities are needed or proposed for development on the National Forest in the Cave Rock area at this time.)
- All permanent protection (e.g., bolts) associated with sport climbing will be removed from Cave Rock over a 6-year phase-out period that would remove approximately 50 fixed anchors and their associated equipment (e.g., carabiners and slings) per year. Accept the assistance offered by local climbers at the 1998 collaboration meetings, or hire climbers, or use Forest Service staffers who are experienced climbers to remove the routes. Traditional climbing that does not require permanent anchors left on climbs may continue.
- Route maintenance activities are prohibited. Routes that need bolt maintenance in order to be safe will be priority for removal.
- Prohibit installation of new climbing routes requiring placement of fixed anchors left in the rock. Prohibit climbing using artificial light.

In addition to these measures, baseline data about the activities and visitors at Cave Rock will be gathered through a system of voluntary registration, which will also facilitate the dissemination of education materials.



KEY

Areas where routes would be removed under Alternative 2

Climbing trails

01446.01 (12/01)

Figure 2-3
Overview of Cave Rock Features

Alternative 4

Theme: Exclusive Washoe Use

This alternative would provide exclusive access to Cave Rock by traditional practitioners of the Washoe tribe only for their traditional practices. This focus transcends the privacy enjoyed by traditional practitioners in the past, as public visitation has never been prohibited. Such privacy would maximize benefits to the tribe's traditional practitioners during their ceremonial uses at Cave Rock. Where resource conflicts occur, resolutions favoring the TCP would normally take precedence. Where conflicts occur between historic districts—such as where Forest Service decisions will result in an adverse effect on a district whichever way the decision is made, such as graffiti removal—protection of the values of the TCP will take precedence over other historic districts. All non-Washoe traditional uses within the TCP over which the Forest Service has regulatory authority would be immediately prohibited. The National Forest at Cave Rock would be closed to all recreational and public access.

Cave Rock would be managed to enhance its values as a Washoe Tribe TCP. Some of the activities proposed below are required to achieve a baseline that will enable the new management direction to be effective.

- Remove all graffiti and rock work within the cave at the direction of the Forest Service archaeologist, in cooperation with designated representatives of the Washoe Tribe, where doing so does not physically damage Cave Rock.
- Eliminate existing climbing routes, including removal of all permanent protection (e.g., bolts) and other equipment associated with climbing. Accept the assistance offered by local climbers at the 1998 collaboration meetings, or hire climbers, or use Forest Service staffers who are experienced climbers, to remove the routes.
- Restrict other spiritual uses as a non-traditional use.

Alternative 5

Theme: Phase Out Climbing over 3-Year Period

The intermingled and evolved properties at Cave Rock would be managed in a manner that minimizes the effects of modern activities and technology. Sport climbing would be phased out over a three-year period. Alternative 5 would allow activities and protect, preserve, enhance, and interpret improvements that are consistent with the historic period at Cave Rock. Activities would be restricted and improvements removed that adversely affect the qualities for which the property was found eligible to the National Register. Thus, sport climbing would be prohibited as inconsistent with the setting, feel, and association of the historic property, while general public access would be allowed as it had occurred during the historic period. When conflicts between National Register properties arise, they will be managed in favor of the Cave Rock TCP.

Public Access on the National Forest at Cave Rock will be managed to eliminate adverse effects on the TCP and other historic districts in the vicinity as follows:

- Allow only nonmotorized recreation activities outside the highway easement.
- Allow installation of improvements (e.g., parking, sanitation, or access facilities) for resource protection purposes only, not for user comfort and convenience. Please note no such facilities are needed or proposed for development on the National Forest in the Cave Rock area at this time.
- Remove and restrict the installation or maintenance of improvements at Cave Rock. Remove climbing hardware, concrete and rock improvements from the Cave's floor and entrance, and non-historic graffiti to the extent feasible.
- Restrict activities that are not consistent with the historic period (i.e., through 1965, the year of Henry Rupert's death) at Cave Rock.
- Prohibit physical damage or defacement of Cave Rock including the installation of rock climbing bolts.
- Restrict other spiritual uses as a non-traditional use.

Alternative 6

Theme: Maximum Immediate Protection of Heritage Resources (Preferred Alternative)

The intermingled and evolved properties at Cave Rock would be managed in a manner that immediately minimizes the effects of modern activities and technology. All climbers would be prohibited from using Cave Rock immediately. Alternative 6 would allow activities and protect, preserve, enhance, and interpret improvements that are consistent with the historic period at Cave Rock through 1965, the year of Henry Rupert's death. Upon adoption, activities would be restricted and improvements removed that adversely affect the qualities for which the property was found eligible to the National Register. Thus, climbing would be prohibited as inconsistent with the setting, feel, and association of the historic property, while general public access would be allowed as it had occurred during the historic period (i.e., up until 1965). When conflicts between National Register properties arise, they will be managed in favor of the Cave Rock TCP. This change in management would be implemented immediately, without a phase-out period.

Public Access on the National Forest at Cave Rock will be managed to eliminate adverse effects to the TCP and other historic districts in the vicinity as follows:

- Allow only nonmotorized recreation activities outside the highway easement.
- Allow installation of improvements (e.g., parking, sanitation, or access facilities) for resource protection purposes only, not for user comfort and convenience. Please note no such facilities are needed or proposed for development on the National Forest in the Cave Rock area at this time.
- Remove all climbing hardware, concrete and rock improvements from the Cave's floor and entrance, and non-historic graffiti to the extent feasible. Forbid the installation of climbing hardware or other improvements at Cave Rock.
- Restrict activities that are not consistent with the historic period (through 1965, the year of Henry Rupert's death) at Cave Rock.

- Prohibit physical damage or defacement of Cave Rock, including the installation of rock climbing bolts.

Table 2-2 compares the activities addressed by each alternative.

2.7 Significant Effects and Mitigation Summary, Comparison of Alternatives

2.7.1 Geology

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Geology	A significant geological environmental effect would be (1) a use of Cave Rock that poses a risk to human safety or loss of property, or (2) a use that causes adverse environmental effects to Cave Rock as a geological resource.	NE	NE	NE	NE	NE	NE

NE = No Effect

SE = Significant Effect

There would be no significant geological environmental effects associated with any of the alternatives; therefore, mitigation is not required.

2.7.2 Heritage Resources

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Heritage Resources	A significant environmental effect on heritage resources would be activities that lead to a loss of Cave Rock's historical, cultural, or archaeological values, including Washoe tribal traditions there.	SE	SE	SE	NE	SE	NE

NE = No Effect

SE = Significant Effect

Discussion of Effects on Heritage Resources

Explanation and Potential Mitigation Measures:

Table 2-2. Comparison of Alternatives

Activity	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Climbing	Allowed without restriction. New bolting and route installation permitted. Existing routes can be maintained without any specific permission from Forest Service.	Most existing routes may be climbed. No new bolt installation (except maintenance) or creation of new routes. Maintenance of existing routes by climbers only with prior permission of the Forest Service. No climbing using artificial light.	Sport climbing prohibited following phase-out (6 years). Traditional rock climbing allowed. No preprotected routes; no bolting.	No climbing as soon as legally possible following the decision.	No climbing following phase-out period (3 years).	No climbing as soon as legally possible following the decision.
Disposition of Existing Climbing Bolts and Other Climbing Equipment Left at Cave Rock	All 47 distinct routes (60 if hybrids are counted) and 325 anchors may be used. Existing equipment and new equipment remaining not subject to regulation.	Approximately eight routes and 50 bolts to be removed. Caribiners, draws, and slings on remaining bolts to be camouflaged.	Remove all bolts and other climbing equipment, as is technically feasible, during a phase-out period of 6 years.	Remove all bolts and other climbing equipment, as is technically feasible, as soon as legally authorized to proceed under the decision.	Remove all bolts and other climbing equipment, as is technically feasible, within three years following the decision.	Remove all bolts and other climbing equipment, as is technically feasible, as soon as legally authorized to proceed under the decision.
Future Route Removal	No additional routes to be removed.	Additional routes to be removed if not camouflaged within 6 months following the decision.	Remove approximately 50 bolts per year for 6 years until all are removed.	No routes remaining to remove.	All routes to be removed within 3 years.	No routes remaining to remove.
Commercial Activities	People could apply for commercial special-use permits. No permits existing.	No special-use permits existing, and all requests for commercial operations would be rejected.	No special-use permits existing, and all requests for commercial operations would be rejected.	No special-use permits existing, and all requests for commercial operations would be rejected.	No special-use permits existing, and all requests for commercial operations would be rejected.	No special-use permits existing, and all requests for commercial operations would be rejected.

Activity	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Graffiti	Do not manipulate existing graffiti. New graffiti is prohibited.	All modern graffiti and historic graffiti that does not contribute to historic districts removed when doing so will not physically damage Cave Rock. New graffiti is prohibited.	Do not manipulate existing graffiti. New graffiti is prohibited.	All graffiti to be removed when doing so will no physically damage Cave Rock. New graffiti is prohibited	All modern graffiti and historic graffiti that does not contribute to historic districts removed when doing so will not physically damage Cave Rock. New graffiti is prohibited.	All modern graffiti and historic graffiti that does not contribute to historic districts removed when doing so will not physically damage Cave Rock. New graffiti is prohibited.
Masonry Flooring	Retain existing flooring and seating. Any new manipulations of the setting prohibited.	Disassemble flooring and seating, removing concrete and any other foreign materials.	Retain existing flooring and seating. Any new manipulations of the setting prohibited.	Disassemble flooring and seating, removing concrete and any other foreign materials.	Disassemble flooring and seating, removing concrete and any other foreign materials.	Disassemble flooring and seating, removing concrete and any other foreign materials.
Other Recreation Uses (Including hiking and fitness, scenic viewing, fishing, picnicking, mountain biking, X-C skiing, snowshoeing, etc.)	No motorized vehicles. No other special restrictions.	No motorized vehicles. No other special restrictions.	No motorized vehicles. Prohibit introduction of modern, permanent technological improvements within the TCP that are associated with recreation that permanently affect the rock, as well as all recreation that physically affects the rock.	No non-Washoe access within the TCP. No motorized vehicles and no other special restrictions in the analysis area outside the TCP.	No motorized vehicles. Special restrictions apply only to activities that are inconconsistent with the historic period (until 1965).	No motorized vehicles. Special restrictions apply only to activities that are inconconsistent with the historic period (until 1965).
Native American Spiritual Uses	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Other Spiritual Uses	Unrestricted	Unrestricted	Unrestricted	Restricted as a nontraditional use	Restricted as a nontraditional use	Unrestricted

Activity	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6
Study and Research	As permitted or sponsored by the Forest Service, in consultation with the Washoe Tribe	As permitted or sponsored by the Forest Service, in consultation with the Washoe Tribe	As permitted or sponsored by the Forest Service, in consultation with the Washoe Tribe	As permitted or sponsored by the Forest Service, in consultation with the Washoe Tribe	As permitted or sponsored by the Forest Service, in consultation with the Washoe Tribe	As permitted or sponsored by the Forest Service, in consultation with the Washoe Tribe
Law Enforcement Monitoring	No special restrictions to enforce. Respond when needed.	Regular patrol to enforce Forest Order.	Regular patrol to enforce Forest Order.	Regular patrol to enforce Forest Order.	Regular patrol to enforce Forest Order.	Regular patrol to enforce Forest Order.
Rescue	Allowed when needed.	Allowed when needed; specifically exempted from Forest Order.	Allowed when needed; specifically exempted from Forest Order.	Allowed when needed; specifically exempted from Forest Order.	Allowed when needed; specifically exempted from Forest Order.	Allowed when needed; specifically exempted from Forest Order
College Class Instruction	No special restrictions; do not need a permit to visit for such educational purposes.	No special restrictions; do not need a permit to visit for such educational purposes.	No special restrictions; do not need a permit to visit for such educational purposes.	Not exempted from Forest Order; not allowed.	No special restrictions; do not need a permit to visit for such educational purposes.	Not exempted from Forest Order; not allowed.
Cave Rock Education Program	None.	Planned.	Planned.	Planned.	Planned.	Planned.
User Voluntary Registration	None.	Planned.	Planned.	None.	None.	None.

Traditional Cultural Property: In the Washoe Tribe's view, effects of rock climbing, including physical alterations of the rock associated with sport climbing, the placement and presence of climbing equipment, and the presence of visible and audible persons on the rock, are considered to be insensitive, distracting, and incompatible with the traditional spiritual activities. In addition, the rock climbing activities affect the setting, feel, and association of the TCP. Climbers' presence and noise impeding on traditional practices affects the ability of the property to convey its significance and therefore diminishes the TCP's feeling and association. From the near view, the visual effect of climbing diminishes the setting, feel, and association of the property, although from a distance, the visual effect is negligible. According to Washoe traditional belief, the intimate contact between climbers and Cave Rock leads to an exchange of power between the rock and climbers that affects the materials of the TCP; the rock has power that will affect people that visit it or the rock's power will be affected by the visitors. Thus, vehicles traveling through the tunnels are transitory and do not affect the rock as much as individuals that are clinging to or hanging on the rock for a prolonged period. Washoe believe that the presence of people at the rock can have ill effects on both the visitor and the Washoe people (Dancingfeather personal Communication with John Maher, June 2, 1999). Sport climbing and/or traditional climbing would be allowed to continue to some degree in Alternatives 1, 2, and 3.

The presence of non-Washoe spiritual users (possible in all alternatives, except Alternatives 4 and 5) is objectionable to traditional Washoe practitioners and diminishes the feel and association of the TCP. The presence of modern graffiti is not consistent with the TCP and diminishes the integrity of the setting, feel, and association. Existing modern graffiti would not be removed under Alternatives 1 and 3, although all alternatives prohibit new graffiti at Cave Rock. Historic graffiti (pre-1965) is consistent with the TCP.

Educational activities that require organized groups visiting the Cave Rock core area also diminish the setting, feel, and association of the TCP, and under Alternatives 1, 2, 3, and 5, college class instruction could occur there. The construction of the masonry flooring and rock seating within the cave has diminished the setting, feel, association, and materials of the TCP, and Alternatives 1 and 3 do not propose their removal. Highway traffic, boating, boat launching, urbanization, aircraft overflights, and scuba activities also add to cumulative significant effects on the Cave Rock TCP, but are outside of the Forest Service jurisdiction.

Potential mitigation measures that could benefit the TCP include: reducing or eliminating the number of climbing routes and prohibiting expansion of climbing activities (proposed in Alternatives 2, 3, 4, 5, and 6); educating users (all alternatives); camouflaging climbing equipment (Alternative 2) or removing it (Alternatives 3, 4, 5, and 6); sending a letter to the local colleges requesting that they not lead field trips to Cave Rock (all alternatives); not allowing college field trips (Alternatives 4 and 6); adopting the proposed climber behavior ethic (see Climbers' Proposal described in appendix A, meeting 4). To varying degrees, these mitigation measures will reduce effects on the TCP. Alternatives 4 and 6 would reduce the effects to not significant.

Historic Transportation District: The presence of climbers and the introduction of modern technology also affect the setting and feeling of the historic district where these activities take place adjacent to and/or are staged from the old trestle trail on the west side of Cave Rock. Modern bolts are visible on the rock face above and below the trestle trail and climbers using this area distract from the historic setting. To varying degrees, each alternative except Alternative 1 reduces these effects. Alternatives 4 and 6 would eliminate these effects, although the public would not have access to the historic resources under Alternative 4.

Archaeological Resources: There could be significant effects on archaeological resources. A woodrat midden, as a source of paleo-environmental data, is located near an established climbing route and could be damaged by climbers using that route. Loss of this resource for scientific study would be a significant effect. Excavations in 1955 found an archaeological deposit beneath what is now the masonry floor of the cave. Uncapping the masonry floor may increase the potential for vandalism or inadvertently destroy archaeological resources currently protected by the masonry cap.

Potential mitigation that could benefit the archaeological resources include recordation of and additional data collection from the rat midden located near the climbing route and removal of the climbing route thus making the rat midden out of reach (could be added to routes planned for removal in Alternative 2, made a priority for removal during the phase-out period in Alternatives 3 and 5, and would be implemented immediately in Alternative 6). Potential mitigation for uncapping the masonry floor and potentially exposing the archaeological resources includes recordation, data recovery, or electing to leave the floor in place thus continuing the protection of the archeological deposit. Artifacts have been noted on the uncapped portions of the floor of the cave and are vulnerable to disturbance or collection by the public visiting the cave. Reducing the number of visitors to the cave would reduce this vulnerability.

2.7.3 Land Ownership

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Landownership	A significant landownership environmental effect would be land transfer that would detract from public recreational opportunities and access/use, especially on the lakeshore.	NE	NE	NE	NE	NE	NE

NE = No Effect

SE = Significant Effect

There are no significant land ownership environmental impacts associated with any of the alternatives.

2.7.4 Recreation: Climbing

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Recreation	A significant dispersed recreation effect will occur by not allowing access to recreational climbing activities where this activity is consistent with the Forest Plan.	NE	NE	SE	SE	SE	SE

Explanation and Potential Mitigation Measures: Alternatives 4 and 6 would prohibit recreational climbing within the Cave Rock TCP. This alternative would prohibit climbing activities where it has previously been allowed and is consistent with the current Forest Plan. Alternatives 3, 5, and 6 would also have a significant effect on climbing because they would effectively eliminate the activity. Cave Rock is a unique geologic feature with surfaces that create a highly challenging climbing experience. As

described in chapter 3, the density of extremely difficult climbs found at Cave Rock is uncommon and although there are other climbing areas nearby, a similar experience cannot be found in the Lake Tahoe Basin. Alternative 2 would reduce opportunities for climbing by eliminating some climbs over the highway, eliminating night climbing, and restricting new climbing routes from being established. Although these restrictions reduce opportunities for the climbers, this alternative allows climbing to continue and thus these limitations are not considered significant.

Potential mitigation that could help to alleviate this effect: This effect is unmitigatible under these alternatives when the primary purpose of the alternatives are considered.

2.7.5 Recreation: General

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Recreation	A significant dispersed recreation effect will occur by not allowing access to dispersed recreational activity where these activities are consistent with the Forest Plan.	NE	NE	NE	SE	NE	NE

Explanation and Potential Mitigation Measures: Alternative 4 would prohibit public access within the Cave Rock TCP. This alternative would prohibit dispersed recreation (non-climbing activities) where it has previously been allowed. Alternatives 1, 2, 3, 5, and 6 would not have a significant effect on dispersed recreation because there would be no change to the current management practice. The general public would continue to have access to Cave Rock for all activities consistent with the historic period (e.g., hiking, sightseeing, picnicking, boating, fishing, etc.)

Potential mitigation that could help to alleviate this effect: This effect is unmitigatible under these alternatives when the primary purpose of the alternatives are considered.

2.7.6 Social Effects

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Social	A significant social effect will occur if (1) Federal land is provided for the exclusive use of a particular religious group.	NE	NE	NE	SE	NE	NE

NE = No Effect

SE = Significant Effect

Explanation: Alternative 4 would only allow traditional Washoe practitioners to use the area when engaging in practices that are associated with traditional uses of the TCP. The effect of this restriction would be to prohibit all otherwise legitimate users from visiting Cave Rock.

Potential mitigation that could help to alleviate this effect: This effect under Alternative 4 is unmitigatible when the primary purpose of the alternative is considered.

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Social	(2) other users will be required to conform their conduct to the religious or cultural concerns of another group.	NE	NE	NE	SE	NE	NE

NE = No Effect

SE = Significant Effect

Explanation: Alternative 4 would only allow traditional Washoe practitioners to use the area when engaging in practices that are associated with traditional uses of the TCP. The effect of this restriction would be to prohibit all other users from visiting Cave Rock. This action would therefore require all visitors to conform their conduct to Washoe belief. Although Alternatives 3, 5, and 6 would restrict climbing, this action is taken to protect historic values at Cave Rock, not to conform to the religious or cultural concerns of another group.

Potential mitigation that could help to alleviate this effect: This effect is unmitigatible when the primary purpose of the alternative is considered.

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Social	(3) There will be a high and adverse environmental effect on the Washoe Tribe.	SE	SE	SE	NE	SE	SE

NE = No Effect

SE = Significant Effect

Explanation and Potential Mitigation Measures: Alternatives 1, 2, 3, 5, and 6 do not respond to the tribe's desires that the area not be visited by people other than traditional Washoe practitioners. In these alternatives there is the potential that Cave Rock could lose meaning to the Washoe Tribe, traditional practitioners might abandon their calling, and traditions that have survived generations could be lost. This would be a disproportionately high adverse effect on the tribe. The last 150 years have seen traditional practices continue at Cave Rock in spite of fluctuating levels of public visitation there. Rock climbing has been pinpointed as particularly disturbing, and Alternatives 3, 4, 5, and 6 essentially eliminate climbing there. Alternative 2 reduces the physical and visual effect of technology/climbing equipment from present levels through some route removal and climbing restrictions. Alternative 1 could see the expansion of climbing in the vicinity. Alternatives 3, 5, and 6 allow uses consistent with the historic period to continue (e.g., public access).

Potential mitigation that could help to alleviate this effect: The actions proposed under Alternative 2 would reduce (50% or less) the significant effect. The actions proposed under Alternatives 3, 4, 5, and 6 would minimize (50% or more) the significant effect.

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Social	(4) Government-imposed burdens will exist at Cave Rock regarding Washoe tribal access to, and ceremonial use of, the sacred area.	NE	NE	NE	NE	NE	NE

NE = No Effect

SE = Significant Effect

Explanation and Potential Mitigation Measures: Alternatives 1, 2, 3, 5, and 6 all present the possibility that tribal practitioners may encounter recreationists when they come to Cave Rock to practice, or during their ritual, which they may consider detrimental to their practice's success. However, the government is not restricting the practitioners' ability to freely express their beliefs through ceremonies and traditional rights, and access to the site is not prohibited by the Forest Service. Therefore, there is not a government-imposed burden at Cave Rock.

2.7.7 Wildlife

Resource Area	Criteria of Significant Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Wildlife	A significant wildlife effect would be adverse effects on wildlife that would contribute to a trend towards federal listing or cause a loss of viability to the population or species.	NE	NE	NE	NE	NE	NE

There are no significant environmental impacts on wildlife associated with any of the alternatives; therefore, mitigation is not required.

Chapter 3
Affected Environment and Environmental Consequences

3.1 Introduction

The Affected Environment portions of this chapter profile the environmental resources of the Cave Rock study area. The sections aim at aiding the reader in understanding the environmental setting and the potential environmental effects that could result under each alternative. Resources described in this section include the physical and biological conditions that could change under the implementation of an alternative. Resources that would not be affected by implementation of an alternative are not discussed here. Further information may be found in the Forest Plan EIS and appendices. This FEIS tiers to those documents. For information regarding tiering, refer to section 1.5 of this document.

The environmental consequences disclose the potential effects of the alternatives described in chapter 2. The sections provide the analytic basis used in comparing alternatives. As with the Affected Environment discussion, effects are evaluated as they relate to the issues raised during project scoping. This chapter discusses direct effects, indirect effects, and cumulative effects.

3.2 Geology

3.2(a) Affected Environment

Cave Rock incorporates approximately 2 acres of rock and 300 feet of shoreline. It is approximately 360 feet high from lake level, up to 800 feet wide, and rises to an elevation of 6,560 feet. Its visible base forms an edge with Lake Tahoe at about 6,228 feet, with portions of the rock extending below the lake surface level down to an elevation of approximately 6,200 feet (LSA 1998:40).

Local Geology – Summary of Lake Tahoe Origin

The Lake Tahoe Basin is the western-most appearance of the Basin and Range fault system. The Sierra Nevada to the west and the Carson Range to the east mark the edges of the Lake Tahoe Basin fault block. The basin was formed over 3 million years ago. The lake filled as a result of combined tectonic (faulting) and volcanic activity. Ice dams and past volcanic flows in the Truckee River had dammed up Lake Tahoe's outlet and caused the lake level to fluctuate during the past 2 million years.

Bedrock Geology of Cave Rock

Cave Rock is a geologic landform located along the southeastern shore of Lake Tahoe. Unlike the granitic bedrock (igneous intrusive rock) that characterizes most of this part of the Sierra Nevada, Cave Rock is a volcanic (extrusive igneous) rock that is younger than the surrounding granitic rock. Cave Rock is interpreted to be a remnant of a volcano that erupted over 3 million years ago.

Compositionally, this volcanic material is classified as andesite, which is intermediate in composition between basalt (e.g., Hawaii's volcanic flows) and rhyolitic ash (e.g., Mount St. Helen's ash). Within the Sierra Nevada and around Lake Tahoe, small volcanic plugs are not uncommon. Plugs are pipelike bodies of magma that represent the conduit to a former volcanic vent. Shakespeare Rock and many other volcanic deposits in the north-central Sierra Nevada are interpreted to be relict volcanoes, reminiscent of a time period when volcanism was in a much more active state than it is today.

Andesite is the primary constituent of Cave Rock, but metamorphic rocks are also represented in this landform. Mica schist and quartzite are visible in bed-like form, though they appear folded or bent, typical of sedimentary rocks exposed to compressional stresses. It is possible that when Cave Rock erupted, adjacent sedimentary material was carried along with the magma, but did not melt and become incorporated into the flow. Rather, the sedimentary rocks (i.e., sandstone, clays) were super-heated and recrystallized into the schist and quartzite through a process known as contact metamorphism. These older sedimentary materials are not visible outside of the volcanic walls of Cave Rock, so it appears that either they were brought to the surface from a greater depth, or the sedimentary rocks have since been stripped away through erosional forces. The latter is more likely, because those sedimentary rocks in contact with the hot magma would have recrystallized into stronger, more durable rocks, while those not subject to the same degree of temperature would remain unaltered and more susceptible to erosion (e.g., sandstones vs. quartzite).

Geologic and Recent Physical History of Cave Rock

Volcanic necks or plugs such as Cave Rock are often more resistant than other rock types to the erosive forces brought on by climatic conditions (e.g., wind, snow, ice, rain, and chemical precipitates) because of the nature of the bedrock material and the process by which it formed. As a result, Cave Rock is very distinctive in comparison with other rock formations observed in the immediate area.

A combination of weathering and heat stress and rapid cooling processes has led to an abundance of fractures within the Cave Rock landform. These fractures align themselves in various directions, but a near vertical alignment is noticeable at the entrance to the main cave. Bounded by fractures on both sides, the cave appears to have formed as a result of weathering within the fracture zone. Near-parallel rock faces mark the entryway into the cave and appear to follow the trend of other existing fractures in this section of the formation. This cave has not to date been identified as a *significant cave* under the Federal Cave Resources Protection Act of 1988 (PL 100–691; 102 Stat. 4546; 16 USC 4301–4309).

Cave Rock's near vertical faces were created by a combination of glacial erosion forces and the initial volcanic eruptions. Its numerous fractures (at varying angles), as well as the differential weathering of the formation, have resulted in unique structures such as overhangs, small recesses, and a short-lengthed cave. The recesses and cave were likely carved into the rock along the alignment of the preexisting fractures by the lake shoreline when the lake surface was at a higher level than today. Evidence of the

lake incursion is present in one of the small recesses located near the eastern (northbound lane) tunnel. Rounded cobbles found at the opening of the small structure appear to be old terrace deposits left by the lake many years ago. The central cave does not show these same terrace deposits, but because of the high level of disturbance by humans over the years, it is possible that the rocks were removed or covered by the cement walkway that now exists on portions of the cave floor. The recesses and caves may have been formed in weakened areas (fracture zones or weaker bedrock material) by the erosive action of the lake shoreline over a period of many years.

Approximately 325 steel expansion bolts have been installed into Cave Rock to facilitate rock climbing.

Canoe and scuba surveys conducted as part of the TRPA contact for the Cave Rock Management Plan roughly described the lake bottom topography adjacent to Cave Rock. The main mass of the plug and the bulk of eroded rock around its base extends in about a 50-yard radius beyond the face of the terrestrial edifice. Outlying boulders extend an additional 50 yards. Beyond that outer rock line, the lake bottom is a sandy surface with little observable rock.

3.2(b) Environmental Consequences, Including Direct, Indirect, and Cumulative Effects

Evaluation Criteria, Geology

The Forest Plan directs the Forest Service to prevent utilization of geologic resources from posing a risk to human safety, loss of property, or adverse environmental effects (Practice 57, Geologic Inventory and Evaluation and Geotechnical Investigation, page IV-45). **A significant geological environmental effect, then, would be (1) a use of Cave Rock that poses a risk to human safety or loss of property, or (2) a use that causes adverse environmental effects to Cave Rock as a geological resource.**

Significant Effects Summary, Geology

There are no significant geological effects for any of the alternatives. A detailed analysis of environmental consequences by activity follows:

Climbing Effects on Geology

Direct effects on Cave Rock's geology from climbing activities include the physical alterations of the rock that have occurred where fixed anchors are installed along the climbing routes, and the effects of cleaning the individual routes of loose rock material for user safety, (safety/risk of property loss). The maintenance of fixed anchors also has a physical effect on the rock resource, as does removal of fixed anchors. Finally, the impact of oils and chalk from hand placement on the rock is a direct effect deserving discussion.

Bolt installation involved drilling a small hole (3/8 to 1/2 inches wide and approximately 2 1/2 to 3 inches deep) into the rock surface and installing a steel expansion bolt, with a hanger attached. A minor amount of rock material is drilled out of the hole. Geologically, the effect of this drilling on a formation the size

and composition of Cave Rock is insignificant and does nothing to weaken the structure of the rock. Alternative 1 is the only alternative that allows new placement of fixed anchors.

When climbing routes are created by first ascenders, the route must be cleaned of loose rock or other material that can cause instability. Obviously, the impact of such cleaning is dependent on the amount and type of material along the specific route. There are certain areas on Cave Rock, particularly above the highway tunnels, where the rock is friable, and loose rock could continue to break off due to climbing activity. Because effects associated with cleaning only occur when the route is first installed, direct effects of cleaning new routes are only applicable to Alternative 1, which allows new routes to be created. For all other alternatives that allow climbing, cleaning is not an issue. In any case, geologically, the effect of route cleaning on the Cave Rock formation is insignificant and does not weaken the structure of the rock.

The act of maintenance and removal of climbing anchors currently attached to Cave Rock involves physical impacts on the geology of the formation. However, these effects are considered insignificant. Anchors can be removed from the hole into which they were installed. Typical bolt maintenance would involve replacing the removed bolt (e.g., 3/8 inch in diameter) sometimes with a wider (e.g., 1/2 inch in diameter) bolt, directly into the same hole. Consequently, bolt replacement, using careful and proper technique, does not involve any additional physical impact on the rock.

Bolt removal follows the same principle, but the small hole left by the climbing anchor is typically filled with a mixture of sealant (e.g., cement) and material found at the base of the climbing wall (e.g., soil). By properly filling the hole, the rock is not subject to potential damage from freeze-thaw action that could occur if moisture were allowed to penetrate.

Climbing at Cave Rock uses natural rock holds. The holds used for climbing each of the individual routes can vary slightly depending upon the size and skill of the individual climber, but the best holds will be used by most. Consequently, holds are subjected to hand oils and chalk used by some climbers to prevent slipping. The physical effect on the rock is primarily visual. In other areas, such as red rock cliffs, chalk marks stand out; at Cave Rock they can be noticed in the near view, but tend to blend in. Cave Rock naturally contains color variations. In fact, the plugs along the old toll road appear at a distance to be covered with chalk, but upon closer inspection, one learns that it is the natural rock color. Therefore, the effect of chalk and hand oils on Cave Rock's geology is insignificant.

It has been suggested that indirect effects on Cave Rock's geology could result from climbing activities because installation opens cracks in the rock and thus escalates the natural process of freeze-thaw erosion. However, freeze-thaw effects, by definition, can occur only where moisture becomes entrapped into openings in the rock. Bolts are installed to enable climbers to catch in case of a fall. Consequently, the fit is tight, as a bolt placed with wiggle room would not be safe for its purpose. As described previously, if a bolt is removed and the hole is not sealed, there is a possibility that freeze-thaw action could affect the rock. The risk would depend upon the location of the bolt that was removed and whether it would be exposed to moisture and have the ability to hold that moisture. Bolt removal without filling the hole is not proposed in any of the alternatives presented in this FEIS.

Effects from Nonclimbing Recreation on Cave Rock Geology

Low-impact uses such as hiking, fishing, scenic viewing, picnicking, or stargazing, present little or no direct effects on the physical integrity of Cave Rock. Hikers occasionally visit the cave, and more

commonly walk up the backside of Cave Rock up to its summit. They tend to use existing trails (none of which are system trails) or the historic road. Only slight erosion is in evidence, as would be expected on unvegetated areas. Geological effects are insignificant.

Indirect effects on Cave Rock's geology from low-impact activities could result from vandalism associated with human use of any area. However, so far, Cave Rock has never been seriously affected by vandalism.

Effects from Native American Spiritual Uses of Cave Rock on Geology

Modern Native American spiritual uses of Cave Rock do not appear to physically impact the area's geology. While the specific activities that are conducted by spiritual practitioners are unknown, there is no physical evidence that those activities directly or indirectly affect the geology of Cave Rock.

Traditional spiritual users of Cave Rock are speculated to have burned large fires in the cave that resulted in its smoke-blackened ceiling that remains in evidence today (see section 3.3, "Heritage Resources"). This is not a current practice and environmental effects from the fires occurred long ago.

Effects from Other Spiritual Uses of Cave Rock on Geology

Other spiritual uses of Cave Rock do not appear to physically affect the area's geology. While the specific activities that are conducted by spiritual practitioners are unknown, there is no physical evidence that these activities directly or indirectly affect the geology of Cave Rock.

Effects from Graffiti on Geology

Human use of any area can result in people who violate existing regulations that prohibit littering and graffiti (36 CFR 261.11 [B&D], and 36 CFR 261.9). Both painted and carved graffiti are in evidence at Cave Rock. Most graffiti are more than 25 years old; some date back to the late 1800s. Modern "tagging" is rare and almost exclusively associated with the highway tunnels.

The act of graffiti removal can occur in many forms that variously affect geology. Sometimes washing with chemicals can remove the graffiti, without physical effects on the rock's geology. For carved or etched graffiti, it would take physical manipulation of the rock surface (by grinding down or filling) to remove the graffiti. The latter method is not proposed in any of the alternatives. In either case, the integrity of the rock formation is not threatened and effects on geology are insignificant.

Effects from Commercial Activities on Geology

Physical geological effects from commercial activities would vary depending upon the activity proposed (e.g., guided tours to the top versus mining). Currently, there are no special-use permits, or proposals for any, in effect for the area.

Effects from Educational Activities on Geology

The Forest Service has been informed that two community college classes conduct field trips that involve walking to the top of Cave Rock. Effects from these activities are the same as those described previously for low-impact recreational uses.

Effects from Masonry Flooring and Rock Seating within the Cave on Geology

A masonry floor was added and rock seating arranged in the cave in the early 1990s, without Forest Service authorization and is in violation of Forest Service regulations regarding resource damage. The physical effect of this activity on the geological resource is unknown because the site was not assessed until 1998, after the cave was manipulated and the floor installed. Accounts of the preexisting condition of the cave vary. At Forest Service collaboration meetings, some participants speculated that the debris from tunnel construction made up the floor of Cave Rock and was about 30 feet deep. The TRPA Cave Rock Management Plan (LSA 1998:82) includes a description from a Washoe consultant that the natural floor of the cave was "just rocks (like gravel.)" Heizer and Elsasser (1953:9) are quoted in the same citation from the TRPA Cave Rock Management Plan; in their description of the cave's floor in 1953, the "[g]lacial gravels and rock fall make an irregular cave floor and a large talus jumble outside." *Climbing Magazine* (No. 132, June/July 1992:39) was also quoted in the TRPA plan as stating: "to rearrange the boulders, (he) rigged a come-along system employing bolts on the cliff."

From these accounts, a Forest Service geologist hypothesizes that rumors that the original cave floor included deposits from tunnel blasting are false. The natural floor was likely small, loose rock and more naturally scattered large boulders. Some of the rock cemented into the cave floor was imported, such as the large chunk of obsidian. It is unknown whether it was brought in by the person who installed the floor, or whether that person found it in the cave.

To remove the masonry floor would require the use of wheelbarrows, sledgehammers, hammers, prybars, and other tools. Geologically, the removal of the cave's masonry floor is irrelevant. To move the multi-ton boulders again would require a similar come-along rigging system as was employed during construction of the masonry floor.

Effects from Study/Research on Geology

To complete this FEIS and to further scientific knowledge, the Forest Service commissioned several studies in the Cave Rock vicinity. Biological surveys are completed, a rat midden study has been completed, a geological assessment was made, a total inventory of fixed anchors on Cave Rock has occurred, and the TRPA contractors conducted a complete archaeological physical survey of the area. None of these assessments physically affected Cave Rock's geology, either directly or indirectly.

Effects from Monitoring and Law Enforcement Activities on Geology

To determine compliance of the Forest Order, the Forest Service's law enforcement branch routinely patrols Cave Rock. Sometimes officers view the rock from the boat ramp with binoculars; other times

they hike into the cave. In addition, the agency plans annual assessments of the status of fixed anchors, using the 1998 map as a baseline. None of these activities physically affect Cave Rock's geology, either directly or indirectly.

Effects from Rescue Activities on Geology

People visiting Cave Rock have occasionally required rescue assistance from the Tahoe-Douglas Fire Protection District. These activities are necessary for public health and safety and are specifically exempted from forest orders that apply at the site. There is a possibility that future rescue activities could require bolt installation to protect rescuers while they perform their duties. In this case, the effects would be the same as described in the climbing section, above. Such effects could occur in any alternative, as agencies performing rescue activities are specifically exempted from forest orders.

Effects from Reasonably Foreseeable Future Actions

As disclosed in section 1.9 of this FEIS, the Forest Service intends to develop a Cave Rock education program (including a signage component), voluntary user registration, and monitoring. None of these activities would directly affect Cave Rock's geology. Indirectly, the education program would likely decrease use in the area, which could reduce the effects described in previous sections. Because the activities described would not significantly adversely affect the geological resource, reduction of use benefits geology in only a minor way.

To accurately assess cumulative effects, the other primary land use activities going on in the vicinity, not within Forest Service authority to regulate, that may affect geology are described in table 3-1.

Table 3-1. Land Use Activities not under Forest Service Jurisdiction in the Cave Rock Study Area that Could Affect Geology

Activity	Jurisdiction	Effect
Highway and tunnel maintenance and improvement, including erosion control	NDOT	Geologically, Cave Rock has been most affected by highway tunnel construction. It created a new baseline and requirement for safety improvements. The TRPA Cave Rock Management Plan described historical modifications to the Cave Rock landform, subsequent to tunnel construction, that modified Cave Rock's formation to increase highway safety. There are no current proposals for additional safety projects.
Utility lines/easements and their maintenance	Holders of easements	A series of utility lines follows the old trail/road easement. Additional easements are currently undeveloped. Development and maintenance of utilities at Lake Tahoe are strictly regulated by TRPA. If such work were required, Best Management Practices (BMPs) would be implemented to prevent erosion.

Neither direct, indirect, nor cumulative effects from activities in the Cave Rock vicinity will adversely affect geological resources. None of the alternatives will result in significant geological impacts. No mitigation measures are contemplated.

3.3 Heritage Resources

3.3(a) Affected Environment

Section 106 of the National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties, and to afford the ACHP a reasonable opportunity to comment on such undertakings. The NHPA requires federal agencies to seek comments from the public and the SHPO. The statute requires full consideration of preservation values by federal agencies, and the review it mandates is designed to ensure that agencies balance preservation with the projected benefit of the completed undertaking. Section 106 of the NHPA provides a procedure for insuring that the requirements of the act are fulfilled. The purpose of Section 106 review is to avoid unnecessary harm to historic properties from federal actions. The NHPA is a procedural statue, it requires consideration of the effects of an undertaking on eligible resources and does not require preservation in every case. Solutions resulting from the Section 106 review process can range from complete protection to agreed-upon destruction of the property. If the decision-maker determines that it is in the public interest to sacrifice the historic property to the needs of the proposal, such an action is not prohibited by the NHPA.

The NHPA applies to all properties listed on the National Register, to properties formally determined eligible to the National Register (e.g., Cave Rock), and to properties not formally determined eligible, but that meet specified eligibility criteria.

In the case of Cave Rock, the Forest Service has determined that the proposed action that this FEIS studies constitutes an *undertaking*. Consultation about the eligibility for each of the three historic districts has occurred and boundaries for the districts were described in the draft TRPA Cave Rock Management Plan. This plan was submitted by the Forest Service to the Nevada SHPO and Keeper of the National Register in the fall of 1998 for formal determination of eligibility. This document (LSA 1998) is incorporated into this EIS by reference. The proposed undertaking responds directly to the issues under Forest Service jurisdiction related to the protection of these properties.

National Register Eligibility and Cave Rock

In August 1996, the Forest Service first determined Cave Rock (minimally, that portion above the highway) eligible to the National Register as a TCP. The SHPO concurred with the finding in October 1996. However, some members of the public challenged the findings of these two agencies, questioning whether a site that contained two highway tunnels blasted through its center and heavily influenced by the noise of traffic flowing through those two tunnels could retain integrity, as required by the regulations.

National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties (Bulletin 38) suggests that there are two fundamental questions to ask regarding assessing a

property's integrity: does the property have an integral relationship to the traditional cultural practices or beliefs, and is the property in the condition such that the relevant relationships survive? Thomas King, in his book *Cultural Resource Laws and Practice* states the concept of integrity in more simple terms: "The place can't be so screwed up that it no longer has whatever made it significant in the first place" (King 1998).

Questions of integrity must be considered with reference to the views of the traditional Washoe, who continue to value Cave Rock as a symbol of their culture and the location where knowledge and power can be attained. To these people, physical alteration of Cave Rock's setting as well as the impacts of highway noise have not eliminated the cultural significance of the site. In fact, the original determination of eligibility notes that the transportation improvements offer a symbol of the resilience of the Washoe Tribe's traditions, beliefs, and worldview against tremendous odds imposed by the demands of the dominant culture, and cites that essential features are clearly recognizable and that relevant relationships survive (Rucks 1996).

The Forest Service requested a formal determination of Cave Rock's eligibility from the Keeper of the National Register in September 1998. The Forest Service submitted the TRPA Phase II contract draft product with its request.

In October 1998, both the Nevada SHPO and the Keeper concurred that Cave Rock has the integrity to not only be eligible to the National Register as a TCP, but to be eligible under the theme of transportation, as well as for its archaeological component. Therefore, the Forest Service concurs and concludes that Cave Rock has the integrity required to be eligible to the National Register.

Eligibility for Listing as a TCP

Archaeological evidence suggests that Lake Tahoe had been an important, continually used niche of aboriginal peoples for at least 10,000 years. The Washoe are recognized as the descendents of at least the last 1,500 years of aboriginal occupation, with their ancestry possibly dating back to the entire 10,000 years. Before European encroachment, the Washoe occupied and controlled an area bordered by Honey Lake in the north, the headwaters of the Stanislaus and Walker Rivers to the south, the Pine Nut Range to the east, and the Sierra Nevada crest to the west. Within this core area, major habitation centers were located primarily in lower elevation valleys to the east and north of Lake Tahoe. Springtime brought occupants of all the major habitation centers to Lake Tahoe, where small, mixed-gender, family-based groups camped in the area to renew social relationships, fish, hunt, and gather and mill plant foods. The encroachment of European settlers quickly precluded traditional Washoe use of the Lake Tahoe environs. Throughout the Washoe tenure at Lake Tahoe and in spite of their 20th-century exclusion, Cave Rock has endured as an important symbol of Washoe traditional values and helped maintain the viability of Washoe culture.

The Washoe Tribe remains a living community, and Cave Rock is historically rooted in the tribe's beliefs, customs, and practices. Cave Rock—*De'ek wadapush*, or "standing gray rock"—is unique as the quintessential symbol of Washoe culture and spirituality that commands both adoration and avoidance. As both a physical and symbolic feature, Cave Rock is associated with Washoe traditions regarding the creation of a landscape central to their heritage, belief, and cultural identity. Historic and modern land development and recreational uses have introduced modern human presence and related activities into this traditionally sensitive setting. Although these uses deter traditional use, they do not diminish traditional

power. The significance of Cave Rock is in the power it embodies, and that power remains (LSA 1998:152).

Mythologically, Cave Rock is the location of an epic confrontation between *me'tsunge* or water babies (powerful dwarf-beings, common in Washoe cosmology, who traversed all waters of the land and controlled their flow) and a small weasel brother (a mythological ancestor of all Washoe) that occurred during the creation of the Tahoe landscape, as documented by Dangberg (1968) and Price (1980). Water babies are thought to congregate at Cave Rock, which is believed to contain the entrance to a tunnel that allowed them to travel to the adjoining Carson Valley waterways.

Cave Rock is the location and source of power that influences, or is influenced by, those who visit the rock. A white sand path traveled by Washoe doctors is believed to lead underwater from Cave Rock to an undisclosed location on the northwest shore of the lake. Additionally, Ang, an enormous man-eating bird, would take its victims to its nest on a now submerged island offshore from Cave Rock to devour them, until it was outsmarted by an old Washoe man who killed it at Cave Rock.

So powerful and important is Cave Rock that many Washoe continue to believe that the health and integrity of their society may be jeopardized if traditional practices are not observed there. Traditional Washoe assert that Cave Rock is to be avoided by all people, except traditional Washoe practitioners who have been called to seek power or knowledge at the rock. Many Washoe honor Cave Rock by practicing and requesting total human avoidance, or at least demonstration of a respectful attitude, there. They believe that Cave Rock as a whole should be avoided, except by a few traditional Washoe practitioners, especially the cave (considered the nucleus of the rock), the top of the rock, and the water beneath the rock, which appear to be particularly taboo (LSA 1998:75).

The presence of others at Cave Rock is believed to endanger the lives of all people. Although contemporary Washoe opinions regarding Cave Rock and appropriate uses there vary, some members of the Washoe Tribe believe that the irresponsible actions of unauthorized individuals at Cave Rock can endanger the safety of those who respectfully stay away (LSA 1998:69). They believe that if respect for Cave Rock is in place, then the act will infuse and restore dignity to the rock. This is believed to enhance the integrity of the Lake Tahoe natural environment and to promote the safety and well-being of all people, Washoe and non-Washoe alike. (LSA 1998:172)

TCPs reflect traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of its community. The Cave Rock TCP has an association with the cultural practices rooted in the Washoe Tribe's history, and is important in maintaining the continuing cultural identity of the tribe. Cave Rock is unidentifiable as a special place to those who do not belong to the traditional community that values it.

Historically, Washoe doctors with water baby power were the only Washoe that dared to visit Cave Rock to commune with the water babies, acquire power, and effect cures. Two named Washoe doctors, Welewkushkush and Blind Mike, were known to visit Cave Rock to acquire power, and sometimes leave offerings, during the initial post-contact period from 1848 to 1900. Henry "Moses" Rupert (1885–1965), the subject and informant of the only ethnographic study of Washoe spiritual practice, is known to have continued traditional use of Cave Rock throughout his lifetime. Because Henry Rupert was the last publicly active Washoe doctor, or spiritual practitioner, historically associated with Cave Rock, the "late historic period" has been defined as extending through the duration of his life, which ended in 1965.

Recent ethnographic data indicate that modern practitioners continue to visit Cave Rock for renewal and curing (LSA 1998:89), looking back at past leaders as spiritual mentors. These modern practitioners

maintain a degree of reticence and anonymity regarding their calling (LSA 1998:77). The locations on the rock where doctors practice are individualized, often secret, and not consistent from one doctor to the next. Timings of practices are also not consistent and are dictated by the dreams of the doctor or the needs of patients requiring healing. Disturbance of doctors during these ceremonies are believed to cause sickness, death, or other harmful effects to the doctor, his family, his patient, other Washoe people, or the person disturbing the ceremony.

Traditional Washoe doctoring at Cave Rock appears to have been limited to men, and there is no mention of women in ethnographic literature. One female Washoe spiritualist uses Cave Rock today (LSA 1998:84). However, during the 1998 collaboration sessions, a Washoe elder expressed concern regarding female (climbing) use at the site, noting that the presence of women was particularly a desecration. It has been stated that, traditionally, women were not allowed to be at, or even look at, Cave Rock (LSA 1998:85).

The original 1996 determination of Cave Rock's eligibility to the National Register (Rucks 1996) concluded that the Washoe have maintained ties to their traditional landscape at Lake Tahoe in spite of transformations brought on by development. Cave Rock has maintained its role as a place of accumulated spirit power through countless generations of traditional doctors, in an unbroken tradition, since long before contact with Euroamerican culture. It has documented associations with specific traditional practitioners significant in Washoe history, and continues to function as a sacred site. Recreational and highway development impedes this use, but has not diminished the power the rock embodies. Still, many Washoe people consider recreational activities at Cave Rock to be disrespectful and feel that they trivialize the importance of the rock to the maintenance of Washoe culture.

Although Cave Rock was found to have the integrity necessary to be eligible to the National Register, some members of the Washoe Tribe, including known practitioners at Cave Rock, feel that the ongoing activities detract from its integrity and feel that the property's traditional cultural values would be enhanced if these activities were restricted. (See environmental consequences discussion, below.) Other physical effects produced by road construction are considered irreversible; there is no way to completely restore the physical integrity of Cave Rock to its prehistoric condition, and many Washoe do not feel that this restoration is even necessary. Partial restoration of more "minor" physical disturbances (e.g., graffiti) is a more nebulous issue. (LSA 1998:171)

The **management boundary for the Cave Rock TCP** is a 10-acre crucial core zone, an area of traditional Washoe avoidance. Its **period of significance** is from prehistoric times to the present. The proposed management district is the minimal and most crucial zone of Washoe concerns. As described in the TRPA contract document (LSA 1998:75) it includes:

- Cave Rock and its broad terrestrial base extending about 500 feet in diameter, ending at the midpoint of the saddle on the east, and at the water's edge on the west; and
- the underwater continuation of the Cave Rock geologic formation, consisting of naturally eroded and blasted rock extending into the lake bed in a radius of about 100 yards and down to an elevation of approximately 6,200 feet (or about 25–30 feet below the lake surface).

Terrestrial jurisdictions included within this historical management boundary are federal (administered by the Forest Service, LTBMU) and NDOT. Underwater lands below 6,223 feet elevation are administered by the State of Nevada, Department of Natural Resources, Division of State Lands. This FEIS discusses proposed management solely of National Forest System lands over which the LTBMU Forest Supervisor has jurisdiction.

This 10-acre core area is surrounded by a 200-acre buffer area, outside of the TCP's MA boundary, which is described as a "cautionary interface zone" that requires, under traditional Washoe practices, a respectful attitude and special observances. A larger cosmological area, taking in much of the original Washoe homeland, forms the final concentric circle surrounding Cave Rock (LSA 1998:69).

Eligibility for Listing as a Transportation District

Initially, aboriginal peoples used a trail over Cave Rock to avoid difficult travel along the shoreline below. The ethnographic Washoe continued to use this trail to avoid the forbidden areas of the rock.

Significance in transportation is attributed to Cave Rock's key role in trans-Sierra travel and involvement with early wagon traffic and the initial development of the Lake Tahoe Basin and adjoining Comstock Lode and Mother Lode, and its later designation as a segment of the Lincoln Highway and U.S. Highway 50. Construction and use of roadways at Cave Rock are associated with personalities important in state and local transportation history. Each of the four road segments exhibit distinctive engineering features exemplifying 19th- and 20th-century road building; they have sufficient length, structural integrity, and integrity of setting. (LSA 1998:161)

As an impediment to road travel within the Tahoe Basin, for the past 150 years Cave Rock has posed an engineering challenge that required substantial engineering expertise to pass over, around, and ultimately through it. Early travelers accomplished this feat by improving the aboriginal trail over the saddle above the rock to travel along the east shore of the lake to either Glenbrook or over Spooner Summit. Known as the Bonanza Road, or Johnson's Cut-Off Road, the section that passed Cave Rock serviced traffic between Placerville on the west side of the Sierra, Eagle Valley (Carson City) on the east side, and eventually Virginia City (after the discovery of the Comstock lode in 1859) between 1858 and 1863.

When the grade over the rock proved unsuitable for heavier freighters moving supplies to the Comstock mines at Virginia City, a trestle road was constructed around the lake side of Cave Rock to accommodate them. This trestle road was an impressive engineering feat for its time and "constituted the greatest single expenditure for road building between Placerville and Virginia City." (LSA 1998:119) After the turn of the century and the decline of the Comstock era, the trestle road served automobile travelers and was designated part of the Lincoln Highway system in 1914–1915. It was incorporated into the U.S. Highway 50 system in 1925. Automobile traffic continued to use the road until construction of the first tunnel through Cave Rock, giving the trestle road a useful life span of over 60 years.

Eventually, two tunnels were blasted through the rock (in 1931 and in 1957) to handle the increasing automobile traffic generated by Lake Tahoe tourism. Graffiti within the cave is believed to be associated with some of these road-building episodes. Consequently, Cave Rock presents a unique circumstance where four successive generations of road building are preserved in close proximity (LSA 1998:48). These roadways represent an evolving travel corridor that moved aboriginal peoples, early immigrants, commercial freight, and tourists along the east shore of Lake Tahoe.

Cave Rock carries several distinct but overlapping historic travelways. One road over, one road around, and two tunnel roads through Cave Rock mark a unique circumstance where four generations of road construction occur side-by-side and in close proximity and, yet, retain their distinctive engineering characteristics (LSA 1998:161). The following roads and trails were all intensively surveyed by two archaeologists in 1997, as part of the TRPA contact:

1. The Old Washoe Indian Trail: No artifacts or features were observed.
2. Johnson's Cut-Off Road (1850s) over Cave Rock: Route and grade of this toll road are intact, although they may have been modified when the route was used as a detour in the 1930s during tunnel construction. There are seven remaining retaining walls, one debris scatter, and several oil drums.
3. The 1863 Lake Tahoe Wagon Road (trestle road): Route and grade are intact, but the original bed has been modified to accommodate the 1930s-era parking area. All three retaining walls are intact. The trestle support foundations and bolts remain attached to Cave Rock, although all of the wood trestle planking was reportedly removed by NDOT for safety reasons in the 1970s. A few isolated artifacts were inventoried on the road segment around Cave Rock. At the time of its construction, this segment of road constituted the greatest single expenditure for road building between Placerville and Virginia City ($40,000 for 1 mile of road construction). This roadway was later redesignated as the Lincoln Highway.
4. 1914–1925 Lincoln Highway around Cave Rock (see Lake Tahoe Wagon Road).
5. The Glenbrook National Forest Highway and U.S. Highway 50: Includes the 1931 (151-foot) tunnel and two-lane auto road. The route, grade, and tunnel basically remain in the original condition, except that additional rock above each of the portals was blasted in the 1950s to reduce the hazard of rockfall. A 1930s-era parking lot and observation area were created along the trestle road. These developments could have allowed more direct exploration of Cave Rock than is experienced today. Casual sightseeing would have probably focused on the overlook at the top of the rock and visitation of the cave by the curious. Construction plans had also included steps to the cave that were never constructed.
6. 1957 (410-foot) tunnel and four-lane highway: Route and grade remains, and the tunnel appears to retain its original construction features. This tunnel is lined with concrete.

Well-intentioned people have conducted a Cave Rock cleanup campaign during the last decade, removing much material from the cave's interior and the surrounding area. Refuse older than 50 years and potentially of significance in interpreting historic events has been inadvertently removed along with modern garbage. Consequently, archaeological interpretations of activities along the historic roadbed and saddle above the rock have been hindered (LSA 1998:156).

The **management boundary** for the National Register-eligible Historic Transportation District is the sections of the roadbeds. These road segments are limited to those portions contained within and adjacent to the 10-acre historical management boundary for the Cave Rock TCP (LSA 1998:174). They are controlled under two legal jurisdictions, the federal government (as managed by the Forest Service, LTBMU) and NDOT (under easement from the Forest Service).

The **period of significance** for this National Register-eligible Historic Transportation District begins in 1853 and extends until the completion of the second Highway 50 tunnel in 1957. The four roadway segments variously share intersecting routes, resulting in this long period of significance (LSA 1998:161).

Eligibility for Archaeological Values

Cave Rock is a repository of scientific data on environmental history, archaeology, and Washoe prehistory. Archaeological resources include any surface, subsurface or submerged location, such as a site, building, structure, shipwreck, cave, rockshelter, midden, or feature that contains material remains of

prehistoric or historic human life or activities that are 100 years of age and are of archaeological interest (36 CFR part 79). Cave Rock was the first archaeological site to be excavated in Douglas County to receive a Smithsonian number (DO-1/University of California at Berkeley; DO-8/Nevada State Museum). The cave itself is an important archaeological site regarding Washoe prehistory (LSA 1998:158). Cave Rock is the only Washoe spiritual site that has been archaeologically tested and ethnographically studied (LSA 1998:189). Cave Rock was initially tested in 1953, when one artifact was recovered: a single cobble chopper, recovered at 12 inches depth. (LSA 1998:54). Heizer and Elsasser are quoted in the TRPA plan as describing the cave's status in 1953 during the testing as:

A partially smoke-blackened cave or rock shelter, measuring about 70' from the dripline beyond the mouth to the back wall of the cave. Cave proper is about 18' wide at the mouth, 10' high, and extends almost horizontally for 30' to the back wall, which is about 8' high and 8' wide. Undoubtedly used as a temporary camping spot. Glacial gravels and rock fall make an irregular cave floor and a large talus jumble outside.

A second excavation of the cave in 1957 was carried out in three test pits, dug to a depth of up to 52 inches. The total inventory of artifacts (two projectile points, one basalt biface, animal bone, charcoal, and two pieces of decorated bone) were found at depths of 1–6 inches and 12–18 inches. Intact archaeological deposits survive at Cave Rock and have the potential to preserve perishable artifacts. It is the only Washoe sacred site that has been archaeologically tested and ethnographically studied. Native American artifacts exist around the main volcanic plug, as well as around minor plugs nearby, and suggest auxiliary use as ritual offering and purification points. (LSA 1998:49) The archaeological deposit on the floor of the cave has been disturbed by the unauthorized construction of a rock and concrete floor, and rearranging of large boulders, in the early 1990s. Effects from the construction activities to the archaeological deposit on the floor of the cave are unknown at this time. Damage may have occurred to the deposit, or it may have been simply sealed and preserved.

At Cave Rock, a series of at least five fossilized woodrat middens within the upper walls of the cave provided pollens that were sampled and studied at the request of the Forest Service with the concurrence of the Washoe Tribe. Their environmental data potential have indicated transformations in plant communities over time, providing clues regarding regional climate changes. Submerged tree stumps, under the Nevada Division of State Land's jurisdiction, have also provided environmental data and included as individual sites eligible for listing on the National Register.

The TRPA contract effort field examined all parts of Cave Rock, short of those requiring technical climbing to access. The saddle, auxiliary volcanic plugs adjacent and east of Cave rock, the old Indian Trail, and historic roads (totaling 6 acres) were intensively surveyed by two archaeologists in 1997. As a result of this survey, the archaeologist noted that the assemblage of archaeological resources is extraordinary (LSA 1998:60) for the following reasons: (1) the scarcity of Native American artifacts encountered (only 14); (2) only finished tools were found without any of the waste debitage that is typically associated with living sites; and (3) the artifacts found were considered exotic in terms of function and material type (LSA 1998:61). Archaeological deposits inside the cave have not been protected over the years and it is possible that visitors to the cave since the 1850s may have collected artifacts (LSA 1998:158). In addition, the cleanup activities described above may have contributed to the inadvertent removal of refuse older than 50 years, which could have provided more evidence of historical activities.

On the lake bottom at Cave Rock (Nevada State lands), an underwater (canoe and scuba) archaeological survey conducted in 1997 disclosed the presence of a submerged tree stump, 7 feet below the current lake

level, demonstrating lake level fluctuations. No Native American artifacts were encountered, nor was there evidence of a submerged cave or rock overhang. Artifacts found included one piece of porcelain, dimensional lumber, historic and modern glass, six chunks of concrete, two manhole covers, one concrete pillar, and chunks of blasted rock (LSA 1998:68).

No definitive rock art was observed inside the cave or upon Cave Rock. Yet, there are red and white painted designs that could be further assessed to clarify their origins. If the markings prove to be pictographs, this will be the first occurrence recorded in the Lake Tahoe Basin (LSA 1998:63).

Terrestrial jurisdictions included within this historical management boundary are federal (administered by the Forest Service, LTBMU). The Forest Service is the only land manager with responsibility for these resources.

3.3(b) Environmental Consequences, Including Direct, Indirect, and Cumulative Effects

Evaluation Criteria, Heritage Resources

The Forest Plan directs the Forest Service to prevent the loss of historical, cultural, or archaeological values, including avoiding or protecting Native American religious sites and encouraging the reestablishment of the Washoe Tribe's traditional ties to Lake Tahoe (Practice 10, Cultural Resource Management, page IV-24). **A significant environmental effect on heritage resources, then, would be activities that lead to a loss of Cave Rock's historical, cultural, or archaeological values, including Washoe tribal traditions there.**

Significant Effects Summary, Heritage Resources

There are significant effects on heritage resources for some of the alternatives. These are summarized in chapter 2, "Comparison of Alternatives." A detailed analysis of environmental consequences, by activity, follows.

Cave Rock, General Discussion Regarding Analysis of Effects

Assessing the effects of an undertaking on historic properties, and consultation about ways to avoid, reduce, minimize, or otherwise address any possible adverse effects, is a key part of the Section 106 process. The purpose of consultation is to seek agreement on ways to avoid, reduce, minimize, or mitigate the adverse effects of the undertaking on historic properties. In the case of Cave Rock, the Washoe Tribe is an important participant in the consultation process. Typically, consultation results in a Memorandum of Agreement (MOA), which sets out specific steps for avoiding or reducing harm to historic properties.

Consultation considers mitigation alternatives, i.e., actions that limit or compensate for the damage an undertaking does to historic properties. Typical mitigation measures can include:

- limitation of the undertaking's magnitude;
- repair, rehabilitation, or restoration of an affected historic property;
- preservation and maintenance operations for involved properties;
- documentation (drawings, photographs, histories) of buildings or structures that must be destroyed or substantially altered;
- relocation of historic properties; and
- salvage of archeological or architectural information and materials.

There are instances in which no alternatives or mitigation are feasible and the undertaking's benefits in relation to the significance of the property justify damage—or even destruction—as an acceptable loss. Agreement on this course of action is also a possible outcome of consultation.

In addition to involving interested persons in consultation, the agency official must provide opportunities for members of the public to receive information and express their views about preservation issues pertinent to the undertaking. This EIS process fulfills this requirement.

Historic preservation under the NHPA is defined in a way that may not be intuitive to people unfamiliar with the act. The technical definition includes identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance, research, interpretation, conservation, and education and training (USC Section 470W (8)).

There are multiple historic values for Cave Rock that involve overlapping themes and overlapping periods of significance (LSA 1998:160). Recommendations for managing one set of values are not necessarily congruent with those of another, or, more often, management recommendations are in conflict or mutually exclusive (LSA 1998:183). For example, some of the graffiti within the cave that may be adversely affecting the TCP may actually contribute to the Historic Transportation District.

These multiple heritage themes increase the complexity of evaluating effects on the properties, and ultimately complicate their management. Basically, if an undertaking could change the characteristics that qualify the property for inclusion in the National Register, for better or for worse, it is considered to have an *effect*. For the purpose of determining effects, alteration to features of a property's location, setting, or use may be relevant depending on a property's significant characteristics, and should be considered. If the undertaking could diminish the integrity of such characteristics, it is considered to have an *adverse effect*.

Effects from the proposed action and alternatives to the transportation district or archaeological properties have foreseeable mitigation measures that would improve the features setting and feel, if implemented. For instance recordation of historic graffiti could mitigate the effect of its removal from the interior of the cave, or data recovery from the archaeological deposit could mitigate possible damage caused from removing the concrete cap from the deposit.

Effects on the TCP

In the case of the TCP, the determination of effects must take into consideration the viewpoint of the traditional culture, as well as any effects of the undertaking on the traditional community's ability to continue using the property in culturally appropriate ways. Consequently, it is necessary for the Washoe

Tribe—the traditional community in the case of Cave Rock—to provide input regarding the determination of effects.

The appraisal of Washoe sentiments regarding Cave Rock does not represent a consensus opinion in the Washoe community. The viewpoints reflected in the TRPA Cave Rock Management Plan possibly constitute a sample of the sentiments and beliefs of the more vocal tribal members. It is possible, and likely, that other views exist (LSA 1998:182). To those Washoe who contributed opinions to the TRPA, the questions of effects and integrity center around the presence of individuals who are not Washoe spiritual practitioners on Cave Rock, and around measures to reverse this condition (LSA 1998:156)

Existing analysis documented in the TRPA Cave Rock Management Plan states that the current condition of the Cave Rock TCP is such that essential features are clearly recognizable, and relevant relationships survive. In the Washoe view, certain ongoing effects resulting from recreational use can be corrected so that the property retains its integrity. Since Cave Rock is considered to be a cultural and spiritual monument that has sustained itself from the Washoe past into the Washoe present, it need not remain in a condition resembling that which existed only in the prehistoric or historic period. To a degree, Cave Rock is significant both for its original and altered or evolved character (LSA 1998:160).

Cave Rock represents a cultural landmark from time immemorial, and traditions involving Cave Rock have been brought with the Washoe into modern times. Effects on the character and condition of the Cave Rock of prehistoric times are certainly significant, but may not necessarily affect its associations in the present (LSA 1998:150). Despite effects on its physical condition and setting, Cave Rock continues to dominate the Tahoe shoreline and continues to evoke cultural significance and a sense of spiritual power.

The paramount concern for many members of the Washoe Tribe is the protection of Cave Rock from any new effects and the restoration of its traditional respect. The current tribal focus is on correcting impacts the tribe believes it has the power to change. Damage from the existing roadway and boat ramp negatively affect some of Cave Rock's historic values, but are considered permanent and irreversible. New effects, such as climbing, are considered reversible and the tribe feels that they should be curtailed (LSA 1998:69). According to the TRPA contract document, some Washoe are not overly concerned about removing the existing climbing bolts and graffiti, or dismantling the cave floor, knowing the additional damage that might ensue with restoration (LSA 1998:156). However, initial Forest Service consultation with the Washoe Tribe's cultural committee (1998) elicited a different response. The committee requested both removal of the graffiti and the cave's masonry floor.

Effects on the Historic Transportation District

The physical integrity of the road segments is good, with route, grade, and associated engineering features intact. The TRPA Management Plan indicates that adverse effects on the historic setting, feeling, and association, and the character of the Historic Transportation District have occurred in varying degrees with the overall introduction of modern visual and audible elements (LSA 1998:158). The Management Plan clarifies that because the 1850s road over the top of Cave Rock is removed from the highway and is located in a partially forested setting, it is subject to the fewest adverse effects and still conveys the feeling and association of the 19th century. In addition, the old trestle road retains a surprisingly serene setting, considering it adjoins the modern highway.

The Forest Service expressed its opinion to the ACHP that the presence of rock climbing hardware, the activity of traditional and free climbing, and the presence of non-historic graffiti and the masonry floor all represented an adverse effect on the setting and feeling of the Historic Transportation District (letter to Carol Gleichman from Maribeth Gustafson dated February 1, 2001). In a letter dated March 21, 2001, the ACHP indicated they had no objection to the Forest Service's assessment of effects (letter from Don Klima to Maribeth Gustafson). Commercial activities inconsistent with the historic period were also identified as posing an adverse effect. Alternative 1 would not reduce or remove any of the identified adverse effects. Alternative 2 would allow the adverse effects associated with permanent hardware and climbing activities to continue while eliminating the effects of graffiti and the masonry floor. Alternatives 3 and 5 would allow the effects of hardware and climbing to continue for varying periods of time but effects would be phased out over time. Adverse effects associated with graffiti and the masonry floor would continue under Alternative 3 but would be eliminated under Alternative 5. Alternative 4 would eliminate all adverse effects on the Historic Transportation District but removal of historic graffiti would create an adverse effect. Alternative 6 would eliminate all adverse effects on the Historic Transportation District.

Restricted public access to the Cave Rock area associated with Alternative 4 would diminish the public's opportunity to appreciate the historic features of the Historic Transportation District. This effect is not significant, as it does not affect the materials of the district. Table 3-2 lists activities not within Forest Service jurisdiction in the vicinity of the Historic Transportation District.

Table 3-2. Land Use Activities not within Forest Service Jurisdiction in the Vicinity of the Historic Transportation District

Activity	Jurisdiction	Effect (physical, alteration of character, visual, auditory, atmospheric)
Boating	Nevada Division of State Lands	Paleoenvironmental: possibility of damaging submerged stumps during low water.
Scuba Diving	Nevada Division of State Parks; Nevada Division of State Lands	Paleoenvironmental: possibility of vandalism to submerged stumps.

Effects on Archaeological Resources

Sport climbing poses a potential adverse effect on the materials of the archaeological deposit on the floor of the cave (lithic artifacts have been identified on portions of the cave floor that do not have a masonry covering), and to the wood rat midden deposits on the walls of the cave; these effects would not remain after implementation of Alternatives 3 or 5 and would cease immediately under Alternative 4. Because permanent protection is needed to be able to climb inside the cave, traditional and free climbing are not possible within the cave where the archaeological and scientific data are located; traditional and free climbing have never occurred, and cannot occur there, and thus cannot affect scientific historic property values. An adverse effect on the data preserved in the historic and possible prehistoric graffiti would occur under Alternative 4, where all graffiti is to be removed; this effect might be mitigated with data recovery for its scientific values. The archaeological deposit could be adversely affected by removal of the masonry floor, but this adverse effect might be mitigated with data recovery. An adverse effect could occur under Alternative 1 from future commercial activities.

Effects of Climbing on Heritage Resources

Rock climbing is seen as trivializing Cave Rock for the sake of a sport based on a technology that allows climbing in places not before possible, and is particularly offensive to many members of the Washoe Tribe (LSA 1998:100). The presence of rock climbers and their permanently implanted equipment introduces modern technology to that portion of Cave Rock that had until recently remained in its natural state, and diminishes the setting, feel, and association of the TCP. There is also concern by traditional practitioners of the Washoe Tribe that climbing impedes their traditional practices at Cave Rock (LSA 1998:140).

Installation of hardware into the rock has affected the materials of the TCP. Climbers have introduced climbing paraphernalia that have "damaged and scarred" the surface of Cave Rock along the published climbing routes (LSA 1998:152). Many Washoe view the placement of even a single climbing bolt as defacement (LSA 1998:153). Colorful slings and shiny carabineers hang from a number of the anchors on Cave Rock within the cave where the climbing routes are especially difficult. Climbers have been changing some of this equipment to better blend with the rock. The concern regarding the visibility of climbing activities is debatable. Clearly, in the near view, such as within the cave itself, climbers and their equipment are very visible. The TRPA Cave Rock Management Plan (LSA 1998:140) notes that, unless one looks closely at the rock, the existing slings, draws, and runners are not visible to passersby. The angle and height of the cave render it unnoticeable to passing cars. From the boat ramp, it is difficult to notice climbing in the cave, except when a climber swings away from the rock when he or she backs off their route. It is possible to see the lower routes (below the trestle road) from the boat ramp when climbers are present and from the water, especially below the trestle road. During much of the day, shadows hinder views into the cave, itself. The installation of climbing equipment has defaced the rock surface and is visually intrusive to those people sensitive to the resource debate at Cave Rock. Not all climbing equipment visually blends into the rock. Camouflaged equipment exists that could replace the existing equipment and partially mitigate the visual effect; however, the physical effect would remain.

The above effect description is specific to sport climbing. However, even traditional climbing has effects on the TCP. Washoe representatives have expressed concern that the intimate sustained contact with the rock that is inherent in climbing is more objectionable than the brief transitory effects of traffic passing through the tunnels. Climbing in the cave's inner sanctum is felt to be totally unacceptable by some Washoe (LSA 1998:155). However, the members of the Washoe Tribe who attended the Forest Service-sponsored collaboration meeting indicated that no part of the rock was more or less special, that all its parts were equally important.

To some members of the Washoe Tribe, Cave Rock is the location and source of immutable power and this power will be affected or affect persons that come into contact with the rock. From this perspective, although cars and trucks passing through the rock and causing audible and visual distractions are objectionable, they cause little or no alteration to the power of the rock. Climbing, on the other hand, provides an extended interface between individuals and the rock in which the power of the rock can be changed or altered. In addition, neither traditional climbing nor sport climbing is known to have occurred at Cave Rock before the end of the historic period associated with Henry Rupert.

Conversations by climbers also contribute to the generation of noise. While these conversations are not the dominant noise source in the area, current noise levels affect use by Washoe spiritualists and detract from the feel and association of the TCP, as rituals are intended to occur during serene and tranquil periods (LSA 1998:147).

The TRPA contractors summarize: "To the Washoe, the impact issue is not a question of quotas, a few climbing bolts or many, or a few climbers or many; rather, the issue turns upon unauthorized human presence on Cave Rock, an eventuality that is to be avoided."

The act of removing climbing hardware currently attached to the rock also involves effects. The small holes left by climbing anchors are typically filled with a mixture of sealant and material found at the base of the climbing wall. There is simply no way to remove equipment without climbing; consequently, sometimes the top hanger must be left in place to provide roped protection for the climber removing the equipment.

Sport climbing is allowed without restriction in Alternative 1. Restricted sport climbing—a reduction in the number of routes and no new anchor installations —is permissible in Alternative 2. Alternatives 3 and 5 phase out sport climbing; Alternative 5 also phases out traditional climbing at Cave Rock. Alternatives 4 and 6 prohibit all climbing as soon as a prohibition could be legally placed into effect. Some climbing bolts would be removed in all alternatives except Alternative 1.

The act of removing the bolts from Cave Rock would have a short-term negative effect on the setting, feel, and association of the TCP, but would ultimately restore diminished integrity of setting, feel, association, and materials that their installation had caused over the long term.

Effects of Nonclimbing Recreation on Heritage Resources

While hiking, fishing, scenic viewing, stargazing, and other low-impact activities present little or no threat to the physical integrity of the rock, the presence of people on the rock is objectionable and in violation of Washoe avoidance taboos (LSA 1998:142). All alternatives except Alternative 4 allow some level of nontraditional human use at Cave Rock. To be in accordance with Washoe avoidance taboos, recreationists should not walk the rocks along the shoreline to the base of Cave Rock (LSA 1998:157). Hikers occasionally visit the cave and more commonly walk up the backside of Cave Rock up to its summit. Walking on the old road does not encroach on the management boundary of the TCP; however, the diversion to the top of the rock does. The TRPA Cave Rock Management Plan notes that the cave, the top of the rock, and the water beneath the rock appear especially taboo (LSA 1998:168); thus even brief visits constitute an impact in the Washoe view. Again, the members of the Washoe Tribe who attended the Forest Service-sponsored collaboration meetings reflected an alternate view; they indicated that no part of the rock was more or less special, that all its parts were equally important.

Although objectionable to many Washoe, casual hiking, fishing, and sightseeing are consistent with the late historic period at Cave Rock associated with Henry Rupert, and therefore do not effect the setting and feel of the TCP as an evolved property. However, when these activities disturb traditional users of the property, they would affect the property's pre-European encroachment feel and association.

Recreationists' conversations also contribute to the generation of noise. While these conversations are not the dominant noise source in the area, current noise levels affect use by Washoe spiritualists, as rituals are intended to occur during serene and tranquil periods (LSA 1998:147); this would affect the feel and association of the property.

Effects of Other Spiritual Uses of Cave Rock on Heritage Resources

The TRPA Cave Rock Management Plan mentions, but does not elaborate on a non-Native American group that values Cave Rock for its spiritual powers. The presence of these non-Washoe spiritualists is objectionable to traditional Washoe practitioners and diminishes the feel and association of the TCP.

Effects of Graffiti on Heritage Resources

Although modern tagging is not so much an issue at Cave Rock, the cave itself and its entry do contain graffiti. Some of these graffiti date back to the late 1800s. Other historic graffiti include the name of the engineer who designed the early tunnel. Some marks may even be prehistoric pictographs. Graffiti dating from the 1960s, with no apparent historic significance, are also in evidence. Some graffiti are simply painted on; others are etched into the rock. All graffiti are objectionable to many members of the Washoe Tribe. Some historic graffiti at Cave Rock are consistent with the historic period associated with Welekushkush and Blind Mike, and some are additionally associated with the late historic period associated with Henry Rupert. The presence of these historic graffiti diminishes the integrity of the setting, feel, association, and materials of the property prior to the use of the rock by these Washoe doctors, but not the evolved integrity of the TCP characterized by the condition of the property during their lifetimes. However, the presence of modern graffiti is not consistent with the TCP and diminishes the integrity of its setting, feel, and association.

Alternatives 1 and 3 would not manipulate the existing graffiti. Alternatives 2, 5, and 6 would remove all modern graffiti that do not contribute to historic districts and whose removal would not result in damage to the rock. Undated graffiti without a clear connection to the historic transportation district or TCP would be removed. Alternative 4 would remove all graffiti when doing so will not physically damage Cave Rock.

The act of graffiti removal can occur in many forms. Sometimes washing with chemicals can remove the graffiti. For etched graffiti, it would take physical manipulation of the rock surface (by grinding down or filling) to remove the graffiti. Similar to the removal of climbing hardware, a short-term effect on the setting, feel, and association of the property would occur during the removal process, but would result in the restoration of the setting, feel, association, and materials of the TCP over the long term.

Effects of Commercial Activities on Heritage Resources

Currently there are no commercial activities operated under special-use permits by the Forest Service within the analysis area. Requests received in recent years, such as for commercial filming, have been denied. The prohibition on authorization of commercial activities, common to all action alternatives, would benefit the setting, feel, and association of the TCP by prohibiting inconsistent activities.

Effects of Educational Activities on Heritage Resources

The Forest Service does not require schools, such as the Lake Tahoe Community College, to obtain special-use permits to conduct classes on the National Forest. Neither must they let the Forest Service know that they are conducting such classes. The Forest Service has been informed that two community

college classes have conducted field trips to the top of Cave Rock in the recent past. Although these activities are infrequent and have not illicited specific concern from the tribe, the tribe has indicated that all public use beyond that of Washoe spiritual practitioners is objectionable. Therefore, educational activities that require organized groups visiting the Cave Rock core area diminish the setting, feel, and association of the TCP.

Effects of Masonry Flooring and Rock Seating within the Cave on Heritage Resources

A masonry floor and rock seating was added to the cave in the early 1990s, without Forest Service authorization and in violation of Forest Service regulations regarding resource damage. This work altered the setting of the cave and may have damaged archaeological features there, or it may have simply sealed and preserved them. Some people are impressed by the artistic way the rock and concrete flooring was installed, and the way the large rocks were placed for seating. The construction of the masonry flooring and rock seating within the cave has diminished the setting, feel, association, and materials of the TCP.

To remove the masonry floor as required under Alternatives 2, 4, 5, and 6 would require the use of wheelbarrows, sledgehammers, hammers, prybars, and other tools. It would involve a short-term but intense activity level in the cave. The large boulders were originally moved to seating positions using come-alongs that use bolts on the cave walls, according to a reference in the TRPA Cave Rock Management Plan regarding the article in *Climbing Magazine* (No. 132, June/July 1992). To move the multi-ton boulders again would require a similar rigging system. Similar to the climbing hardware removal, a short-term effect on the setting, feel, and association of the TCP would be outweighed by the long-term restoration of the setting, feel, association, and materials of the property.

Effects of Study/Research on Heritage Resources

To complete this FEIS and to further scientific knowledge, the Forest Service has commissioned several studies in the Cave Rock vicinity. Biological surveys have occurred, a rat midden study is underway, a total inventory of fixed anchors on Cave Rock has occurred, and the TRPA contractors conducted a complete physical survey of the area. The presence of all but traditional users of the TCP diminishes the association of the property. However, studies may be needed to mitigate effects. In such cases, the short-term effect of the research to the setting, feel, and association of the TCP would be outweighed by the long-term benefits from new knowledge about the property.

Effects of Monitoring and Law Enforcement Activities on Heritage Resources

To determine compliance with the proposed new Cave Rock management plan, the Forest Service's law enforcement branch would routinely patrol Cave Rock. Sometimes officers may view the rock from the boat ramp with binoculars; other times they may hike into the cave. A short-term effect on the feel and association occurs when individuals enter the core area. However, the short-term effect on the setting, feel, and association of the TCP would be outweighed by the long-term benefit to the property from enforcement activities that are allowed in all alternatives.

Effect of Rescue Activities on Heritage Resources

The Tahoe-Douglas Fire Protection District has provided rescue assistance at Cave Rock. These activities are necessary for public health and safety and are specifically exempted from Forest Orders that apply at the site. Infrequent, short-term effects on the feel and association would occur during rescue operations, which are allowed in all alternatives. Such infrequent effects are not significant.

Reasonable Foreseeable Future Actions

As disclosed in section 2.6 of this FEIS, the Forest Service intends to develop a Cave Rock education program (including a signage component) and monitoring. The Washoe tribe has indicated that they would be in favor of an education program and would like to be involved in its production.

Other Activities

It would be inaccurate to portray that only activities occurring on the National Forest affect the setting, feel, and association of the Cave Rock TCP. There are other primary land use activities going on in the vicinity not within Forest Service authority to regulate that may affect the TCP. These activities are described in table 3-3.

Properties Discovered after a Project Has Begun

Sometimes, even after fully complying with Section 106 requirements, historic properties are discovered after work has begun on a project. If an agency discovers properties that have not previously been listed in or formally determined eligible for listing in the National Register, it may be assumed the properties to be eligible for purposes of Section 106.

In cases where newly discovered historic properties are likely, such as under the alternatives that would remove the masonry flooring of the cave, the Forest Service would develop a plan for treating such properties, as part of Section 106 consultation, before work begins. Plans for handling discoveries should be included in the documentation developed during the assessment of effects and consultation steps of Section 106 review. The plan should include consultation with the Washoe Tribe, because the Native American Graves Protection and Repatriation Act requires consultation with Indian tribes in the event of inadvertent discovery of human remains of Indian ancestry, funerary objects, sacred objects, or objects of cultural patrimony. Artifacts that are unintentionally encountered at Cave Rock, could potentially be sacred objects.

Cumulative Effects on Heritage Resources

Over the last century and a half, the physical attributes of Cave Rock have been altered significantly. Presenting a barrier to modern transportation, methods of circumventing the volcanic plug have evolved with the changing transportation needs. A wagon road constructed over the top, a trestle trail skirting the western side, two tunnels drilled through it, and construction of an Interstate highway have allowed emigrants and commerce to cross the Sierra. While these innovations contribute to the Historic Transportation District, they simultaneously detract from the TCP and have increasingly degraded the

Table 3-3. Activities and Effects on the TCP within the Study Area not under Forest Service Jurisdiction

Activity	Jurisdiction	Effect (physical, alteration of character, visual, auditory, atmospheric)
Highway Traffic/ Road Biking	NDOT	TCP: These developments have directly affected Cave Rock, damaging the physical integrity of the rock through removal and alteration of its fabric, part of which has been incorporated into the adjacent boat ramp and parking area. (LSA Associates, page 153). While these improvements impede traditional use of the area, they have not diminished the rock's essential power, and ritual visitation continues (LSA Associates, page 154). The primary noise source in the Cave Rock vicinity is from vehicles traveling Highway 50. This source is dominant over other noise sources, directly affecting ambient noise levels (LSA Associates, page 146). Thousands of vehicles per day travel through the tunnels, and highway and tunnel improvements have caused damage to the physical integrity of the rock through removal and alteration of rock material. In addition, some of the vehicles driving through the tunnel honk their horns as they pass through. Current noise levels affects use by Washoe spiritualists, as rituals are intended to occur during serene and tranquil periods (LSA Associates, page 147). The traffic levels exceed that of the late historic period associated with Henry Rupert.
Boating	Nevada Division of State Lands	TCP: Recreationists should not approach Cave Rock closer than 100 yards over water to be in accordance with Washoe avoidance taboos (LSA Associates, page 157). The Nevada Division of State Lands, which has jurisdiction over the water, does not intend to create or enforce any regulation limiting boating use near Cave Rock (Montgomery pers. comm.). This use is an unwelcome presence in the Washoe view. Powerboats on the lake are another major noise source in the vicinity (LSA Associates, page 146). Boat noise likely decreased beginning in June of 1999 when the TRPA implemented a no-wake zone (5-miles-per-hour speed limit) within 600 feet of Lake Tahoe's shoreline (LSA Associates, page 147). Current noise levels affects use by Washoe spiritualists, as rituals are intended to occur during serene and tranquil periods (LSA Associates, page 147). Noise and use levels exceed that of the late historic period associated with Henry Rupert.
Boat Launching	Nevada Division of State Parks	TCP: This activity occurs within sight of the cave core area and is visually obtrusive to the TCP although boat launching did occur during the late historic period associated with Henry Rupert.
Aircraft Overflights	Federal Aviation Administration	TCP: Aircraft overflights are another major noise source in the vicinity (LSA Associates, page 146). Current noise levels affects use by Washoe spiritualists, as rituals are intended to occur during serene and tranquil periods (LSA Associates, page 147). Aircraft noise levels exceed those of the late historic period associated with Henry Rupert.
Scuba Diving	Nevada Division of State Parks, Nevada Division of State Lands	TCP: Recreationists should not approach Cave Rock closer than 100 yards over water to be in accordance with Washoe avoidance taboos (LSA Associates, page 157). The issue of "presence" in terms of scuba diving is a different effect compared to boating: Cave Rock is never intentionally touched by a passing boat. The TRPA Cave Rock Management Plan notes that the cave, the top of the rock, and the water beneath the rock appear especially taboo (LSA Associates, page 168); thus even brief visits constitute an effect in the Washoe view. Scuba divers affect the setting, feel and association of the TCP.
Utility Lines/ Easements and their Maintenance	Holders of easements	TCP: A series of utility lines follows the old trail/road easement to support the community development in the area (LSA Associates, page 144). These lines are outside of, but adjacent to, the TCP. These lines and easements are consistent with the late historic period associated with Henry Rupert.
Urban Areas, Residential and Commercial	Private	TCP: Nearby residential development (Pittman Terrace Subdivision and Cave Rock Estates) has not physically affected the Cave Rock landform, as none of the existing residences have been built immediately adjacent to, or encroached onto, Cave Rock. However, indirect effects occur with the presence of residential and commercial uses in the vicinity, which have encroached into the visual envelope surrounding Cave Rock (LSA Associates, page 144). This effect exceeds that of the late historic period associated with Henry Rupert.

values that contribute to the TCP's significance. Besides the physical detractions, increased noise from the highway, boats, and airplanes have intruded on the tranquil setting of the area. Additionally, public use of the area by fisherman and sightseers, rock climbers, and others, detract from the secluded prehistoric setting of the resource. Cumulatively, these effects threaten the integrity of the site more than any do individually, approaching the final straw. To insure that the threshold is not crossed, a limit needs to be put on the number of acceptable effects. The preferred alternative sets this limit by managing for uses and activities that are consistent with the historic period.

Other Views of Effects on the TCP

TCP guidelines give deference to the view of the traditional culture when effects on TCPs are being assessed. However, it would be inappropriate not to represent alternative viewpoints.

During Forest Service collaboration meetings held in 1998, some members of the public challenged the 1996 finding that Cave Rock was eligible to the National Register. They questioned whether a site that contained two highway tunnels blasted through its center and that is heavily influenced by the noise of traffic flowing through those tunnels could retain integrity, as required by the regulations. In part because of these allegations, the Forest Service, in 1998, requested a formal determination by the Keeper of the National Register regarding the eligibility of Cave Rock. As described previously, the Keeper concurred with the agency's determination. Consequently, the issue regarding whether Cave Rock retains the integrity to be on the National Register has been put to rest.

Yet, integrity is still at issue in another way. As represented in his November 4, 1998, letter to Forest Supervisor Juan Palma, Paul Minault of the Access Fund presents a different view:

[T]he very fact that Cave Rock has been found eligible to the National Register suggests that climbing has not impaired the historical integrity of the formation.

Mr. Minault then quotes the formal determination from the Keeper's office that states

…physical changes to the natural rock formation (roads, tunnels, etc.), while impacting the integrity of Cave Rock, have not diminished the traditional cultural significance of the place in the eyes of those who value it, nor its archaeological importance or potential. Cave Rock retains the essential physical features and cultural relationships present in prehistoric and historic times that are necessary to convey its significance.

For clarification, the 1998 formal determination of eligibility to the National Register confirms former Forest Supervisor Robert Harris's 1996 determination that the property retains enough integrity to be eligible to the National Register. Concurrent with the original eligibility determination, Robert Harris also determined, and the Nevada SHPO concurred, that rock climbing posed an ongoing (direct) adverse effect on Cave Rock's integrity.

The above and other references in the TRPA Cave Rock Management Plan and Forest Service application to the Keeper led Paul Minault to the following conclusion:

[A]llowing climbing to continue would not reduce the historic integrity and spiritual significance of Cave Rock...at least provided that climbing was kept within its present limitations. In short, it is apparent that climbing has not significantly impaired the historical or cultural significance of Cave Rock, and

consequently the protection of the historical and cultural significance of the formation does not require that climbing be prohibited now.

The determination was made in 1996 and is the subject of consultation for this project's issue of concern, that rock climbing poses an adverse effect to the Cave Rock TCP. An adverse effect on a National Register property is not defined as one that will make a property ineligible; rather, an effect is adverse when it will diminish the integrity of the property's location, design, setting, materials, workmanship, feeling , or association. The public workshops leading to this FEIS has provided a public forum for the resolution of such important resource issues.

View of the Access Fund

Another view suggests there would be a baseline, such as the 1996 determination of eligibility, for which certain effects would be "grandfathered in." It might not reflect a perfect condition for Cave Rock, especially in the Washoe view, but it reflects a condition of integrity under the NHPA.

In fact, the period of significance for the Cave Rock TCP extends from time immemorial to present day, acknowledging and incorporating the changes there as part of the setting and feel of the TCP.

With regard to rock climbing and other public-use activities, the 1996 condition is reflective of today's condition at Cave Rock. Following the determination of eligibility, a determination of adverse effect for climbing was made immediately. The finding of adverse effect resulted in a May 1997 Forest Order prohibiting "damage and defacement" of Cave Rock, which specifically included the installation of new climbing anchors in its definition. Temporary orders using this language have been in place since then, and again, no violations have been recorded. In fall 1998, the Forest Service mapped all climbing routes and anchors to enable monitoring to continue. Consequently, it is unlikely that the affected environment at Cave Rock has changed in regard to climbing since 1996, when the property was found to have the integrity necessary to be eligible to the National Register.

It is possible to take this 1996 baseline concept one step further. In evaluating effects under the NHPA, the agency is required to assess the effects its proposed action would cause. In this case, the proposed action would reduce the effect from the 1996 baseline. With the exception of the masonry floor, manipulation of the seating, and the graffiti, activities at Cave Rock have been legally occurring under existing management direction.

The Forest Service's preferred action (Alternative 6) would prohibit climbing and remove all climbing equipment as soon as possible. Commercial activities would be prohibited and non-historic graffiti and the masonry floor would be removed to the extent feasible. Passive recreation would continue as it does currently, thus this alternative stops short of restoring the site to the level desired by the Washoe Tribe. An education program promoting voluntary avoidance of Cave Rock by suggesting alternative places to recreate and explaining the importance of Cave Rock to the Washoe people and their cultural norms regarding avoidance would be instituted. The identification of Cave Rock as a special place should encourage some visitors to choose to respect the avoidance taboos of the tribe and recreate elsewhere.

Alternative 1 (No Action) would allow activities that could transcend the 1996 baseline. At an undetermined point in the future, the expansion of activities would threaten the integrity of the TCP. Previously identified adverse effects on the Cave Rock TCP would continue and would likely intensify. Alternative 2 would make steps toward restoration by removing some climbing routes, camouflaging

climbing equipment, and prohibiting the expansion of existing routes or developing new routes. Alternative 3 would phase in restoration and rehabilitation of the TCP. Over a period of 6 years, the previously identified adverse effects associated with rock climbing would be eliminated. Other recreation activities that allow access to the rock but are objectionable to some members of the Washoe community would continue. Alternative 4 would achieve the condition desired by the Washoe Tribe: full restoration of pre-Contact *exclusive use* in a more modern context. All adverse effects on the TCP within federal jurisdiction would be eliminated. Alternatives 5 and 6 are similar to Alternatives 2 and 3, but set the cutoff date for acceptable activities at Cave Rock to the end of the historic period associated with Henry Rupert (1965) and would eliminate climbing over a period of 3 years or immediately (Alternatives 5 and 6 respectively). Recreation activities that are consistent with the historic period, although objectionable to the Washoe, would be allowed.

3.4 Landownership

3.4(a) Affected Environment

The Forest Service contracted with Western Title company (on December 15, 1997) to conduct a formal title search back to patent, with an abstract compilation of the ownership pattern, including recordation information, record of survey or plat map, and current easements for 12 parcels in the vicinity of Cave Rock (see table 3-4). Federal ownership, managed by the Forest Service, consists of the following Douglas County Assessor Parcel Numbers (APNs):

Table 3-4. Douglas County Assessor Parcel Numbers in the Vicinity of Cave Rock

APNs	Date Acquired	Acquired from
003-080-21	1990	Perry
003-080-20	1990	Perry
003-090-01	1972	Dreyfus
003-090-03 (the northerly portion)	1972	Dreyfus

Source: Western Title Company 1997

The U.S. Federal Government owns approximately 32 acres total, since the acreage of the 003-090-03 portion is estimated. Douglas County has been notified of the error in the 003-09 assessor map. The northerly portion of 003-090-03 needs to be a separate parcel owned by the Federal Government.

The Nevada Department of Conservation and Natural Resources, State Lands Commission, owns title to a portion of Cave Rock, including some of the shoreline, up to the high-water mark at 6,223 feet and the portion of the rock submerged beneath the waters of Lake Tahoe.

According to Douglas County and Bureau of Indian Affairs (BIA) records, the BIA does not have any ownership within the basin boundaries. Because title is vested in the federal Government, the BIA would be the trustee of any land held in trust for the benefit and use for the Washoe Tribe. The tribe can own land in fee simple, but no records show any Washoe tribal lands within the basin boundary, although the Lake Tahoe Basin was the tribe's aboriginal territory.

The 1946 Indian Claims Commission Act provided a forum for Indian tribes to seek payment for loss of lands that they had occupied. Successful claims resulted in monetary payments to tribes, rather than land recovery. On December 2, 1970, the Indian Claims Commission (in proceedings before the Indian Claims Commission: *Washoe Tribe v. United States of America*, Docket 288 [Washoe Claims Case]) awarded the Washoe Tribe just over 5 million dollars for the whole of their traditional territory, which included Lake Tahoe at its center. This compensation was for the value of the natural resource at the date they lost their territory, considered to be December 31, 1862 (LSA 1998 53).

Encumbrances on the National Forest at Cave Rock include U.S. Highway 50, a federal highway under the jurisdiction of the Federal Highways Administration, with NDOT as the agency responsible for local maintenance and operations. Roads going through the National Forest lands, identified above, are mostly easements, except for a grant from Whittel to the State of Nevada for a highway and roadside park. Both tunnels are under easements. The easement for the northbound tunnel is for the actual opening of the tunnel. The southbound tunnel is included in the easement for the highway as shown on the map. The land under, adjacent, and over the tunnels is managed by the Forest Service. Therefore, the majority of the rock, the cave and all climbing routes are National Forest System lands. (See figure 3-1.)

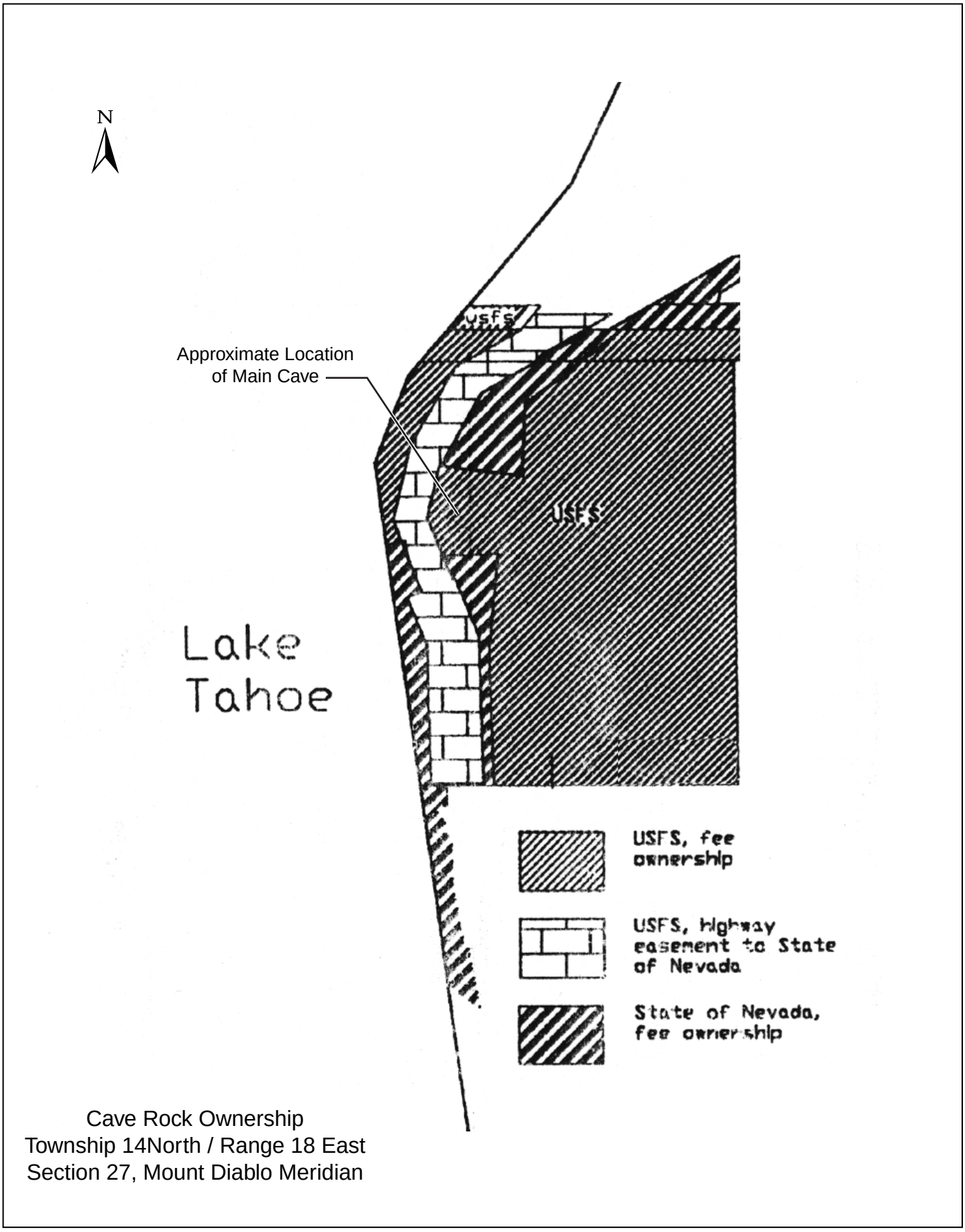
Other easements include a telephone line, which was originally designed to be parallel to the Sierra Pacific Power Company (Sierra Pacific) power lines. The telephone line is currently placed upon the Sierra Pacific power line poles. There is an easement for Sierra Pacific in Lot 4. No easement has been identified for Lot 3 over National Forest lands for the existing Sierra Pacific power line. Sierra Pacific has been notified and will clarify to the Forest Service whether they have records of an easement. No other easements or encumbrances have been identified on National Forest lands in Lot 3, Section 27, T.14N, R.18W, MDM, as above.

For reader clarification, holders of easements may exercise their easement rights without permission by the Forest Service, when easements cross National Forest System lands. However, if work needed to occur outside of easement boundaries, such as for equipment or material stockpile areas or for a construction zone wider than the easement allows, a special-use permit would be required from the Forest Service. The issuance of such a permit would require a Forest Supervisor decision, triggering NEPA analysis that includes an assessment of cumulative effects.

3.4(b) Environmental Consequences, Including Direct, Indirect, and Cumulative Effects

Evaluation Criteria, Landownership

The LTBMU Forest Plan directs the Forest Service to acquire land that will enhance public recreation opportunities and obtain an optimum land base for resource management through purchase, donation, and/or exchange, with the highest priority for acquisition being lake and stream frontage for public access and use. (Practice 41, Landownership Adjustment LWCF and Other Authority, pages IV-36 and 37). **A significant landownership environmental effect, then, would be land transfer that would detract from public recreational opportunities and access/use, especially on the lakeshore**.



Cave Rock Ownership
Township 14North / Range 18 East
Section 27, Mount Diablo Meridian

01446.01 (12/01)

Figure 3-1
Cave Rock Ownership

Significant Effects Summary, Landownership

There are no significant landownership effects for any of the alternatives, as no land transfers or exchanges are proposed under the implementation of any of the alternatives. This landownership section was included in this FEIS to aid reader understanding, because the subject of ownership of Cave Rock had been unclear.

3.5 Recreation: Climbing

3.5(a) Affected Environment

Technical rock climbing is currently the primary recreational activity on the Cave Rock proper. Climbing has been occurring at Cave Rock since approximately 1988, when the first route was thought to be developed on the steep west face above the old Lincoln Highway. In approximately 1989, the first routes were believed to be developed within the main cave. There is no record of climbing prior to this time, though it is likely that some climbing on the more moderate rock nearby could have occurred during earlier years. The improved climbing techniques and motorized bolting technology of the late 1980s allowed rapid climbing development at Cave Rock.

Climbing, as a sport, has changed from an activity popular with a few hearty souls to an activity now commonly taught on a local gym's or school's climbing wall. The first technical roped climb in the Sierra Nevada region took place in 1931; rock climbers began their ascents on the big walls of the Sierras in the 1950s. A climbing school was established at Echo Lakes in the Lake Tahoe Basin in the 1960s, and it continued offering instruction until the early 1970s. Climbing was a significant activity in much of California and the Tahoe area prior to 1988. However, the loose nature of the rock on the more moderate walls of Cave Rock and the extremely difficult level of climbs within the cave did not lend itself to traditional styles of climbing and protection. In traditional forms of climbing, temporary protection devices (such as nuts or chocks) are inserted into cracks and fissures and are removed as the climbers ascend. Traditional climbers generally like long approaches and multiple pitch routes, which are limited at Cave Rock, to enable a more pristine recreation setting. Falls and other hazards, in traditional climbing, can have serious consequences.

Conversely, with the advent of sport climbing methods and the advancement in skill, technical ability, and imagination of climbers, Cave Rock's overhanging walls became a coveted challenge for many of the world's best climbers. Cave Rock is unique as the only rock formation in the region that invites such high-level sport climbing with year-round access (LSA 1998: 4). The development of sport climbing technology expanded the resource base on which climbing activity can be conducted.

Sport climbing is focused on shorter, very technical parts of the rock. The goal of sport climbers is to master the gymnastic moves required to complete a specific route, similar to the way a dancer learns the moves of a specific dance. It is not necessarily a matter of getting from the bottom of a mountain to the top. Sport climbers generally prefer short approaches, like at Cave Rock. Routes are rated, typically by the first ascender, as to their difficulty and the risks they afford, and Cave Rock contains some of the highest-rated (most difficult) routes available in the nation at this time (rated 5.14). For these routes,

located within the cave, climbers hang literally upside down from overhanging rock. Protection and techniques used in traditional climbing rarely allows the ascent of such severe climbs.

Climbing routes are usually named by the first ascent party. The named routes are often recorded in a privately published guidebook. The Forest Service does not get involved in route naming, and Forest Service climbing literature tends to publish information that focuses on area regulations rather than routes and their names. Route names at Cave Rock include among others: Bonecrusher, Coppertone, Shut Up and Climb, Psycho Monkey, Caveman, Trash Dog, Ton of Bricks, Slayer, Acapulco, Over the Falls, RipCurl, Tahoe Monster.

Routes, and their ratings, are published in guidebooks that are similar to trail maps, indicating the location of the fixed anchors to which the climbers attach devices called "quickdraws" (two caribiner snaplinks attached by a nylon sling) through which they run their climbing ropes. It is understood that some members of the Washoe Tribe consider the route names at Cave Rock to be offensive; consequently, climbers at the 1998 collaboration meetings have indicated that the new climbing guidebook will number, not name, the routes on the guidebook maps. Route names and credit to first ascenders will be keyed to the numbered routes in an appendix.

Falling is part of sport climbing, particularly as a climber works out the moves needed to complete a route. The key is to be able to fall with minimal risk of injury, thus allowing personal limits to be pushed with minimal danger. Consequently, sport climbing relies on the installation of fixed anchors, or places along the climbing route where permanent features ("protection") are installed that enable a climber to safely fall and be caught by a rope, or descend ("rappel") after climbing a route. These fixed anchors, typically bolts, thus serve as protection from which to catch a climber's fall. Some routes at Cave Rock are so steep and difficult that quickdraws are left hanging from the bolt, rather than removed as personal property as more typically occurs elsewhere.

Fixed anchors do not provide handholds or footholds designed to ease climbing; rather, the natural rock is still the climbing surface. The fixed anchors provide protection in falls or descents only by providing climbers a place in which to clip in a rope. A second climber holds ("belays") the rope from below. Thus, falls are caught by the belayer, and the climber falls about twice the distance to the last bolt (generally 6–10 feet) until the bolt pulls tight on the last bolt passed. In an ascent, the climber hooks into various pieces of protective equipment, in successive fashion, as they climb. Without fixed anchors, sport climbing routes cannot be climbed safely, especially if no alternative way exists to get down from the climb.

At Cave Rock, fixed anchors (usually expansion bolts) are the only reliable method of protecting climbers in the event of a fall. Bolts are 3/8 inch or 1/2 inch in diameter, 2.5 to 3 inches long, with a small "hanger" for attaching protective gear. These are permanently placed in a hole typically drilled with a battery-powered drill. The bolt is then screwed into a sleeve in the hole, expanding and locking into place. Generally, bolts are placed about 6–10 feet apart along the routes, leading to multiple anchors (including bolts, chains, or "cold shut" hooks) at the top of the climb, from which the climber is then lowered by a belayer, or from which she or he rappels from the climb.

Traditional and sport climbing styles have their distinctive traits, although some methods are common to both styles. The extreme fringe of the sport climbing spectrum, sometimes called "rad" sport climbing, is not in evidence at Cave Rock. This controversial style of climbing manipulates the natural environment by gluing or bolting on holds, or actually chipping them into the rock. Preplacement of protection occurs even when removable protection opportunities are available. Such climbers were not first ascenders at

Cave Rock, where the local climbing ethic frowns on rock alteration for creation of additional holds. In addition, rock alteration is not needed by skilled sport climbers because of the nature of the rock and holds in the overhanging rock.

There are approximately 26 distinct bolted routes in the **Main Cave** which is just above the southbound lanes of Highway 50, immediately south of the tunnel opening. Using the 189 anchors that comprise the 26 primary lines, approximately 15 additional hybrid route combinations can be climbed. The **Lower Cave** area, located below the level of the highway and immediately above the water of Lake Tahoe, has about 14 routes and 105 fixed anchors. **Kona Wall,** also located below the highway, has four routes. Because of its lower angle and cracks, which allow for non-permanent protection, only two of these routes use permanent protection, for a total of 14 fixed anchors. In addition, there is one route on the upper, west-facing side of Cave Rock, which has approximately five anchors. The south-facing side of Cave Rock, above the highway tunnels, includes two routes with a total of 11 anchors. Consequently, the Forest Service's fall 1998 inventory of Cave Rock found 47 distinct routes (60 if hybrids are counted) using about 325 anchors.

The general consensus among climbers is that there is limited new route potential at Cave Rock. New route activity appears to be limited to connecting existing routes on existing bolts to create hybrid routes. No new bolts are known to have been added to the area since 1997.

Over time, depending upon the frequency and severity of falls caught by an anchor, anchors may become unsafe and eventually fail, which could result in injury or death. Climbers can usually determine the degrading condition of a bolt long before failure. Bolt maintenance takes many forms, and generally requires complete replacement of the anchor. Maintenance done poorly can leave additional impacts and affect the quality/longevity of a replaced bolt. Improper maintenance could pull out a section of rock, leaving scars and making it impossible to install a new bolt into the same area. Conversely, if done correctly, installation of a replacement bolt would cause no net increase in impacts on the rock. Most bolts at Cave Rock are considered safe, although concern is increasing among climbers about the degraded condition of several individual bolts.

Cave Rock is extremely popular among skilled climbers for a wide variety of reasons. (It does not contain routes suitable for beginner climbers.) Many of the climbs are rated 5.13 and above; these are among the most difficult climbs available in the sport. No other sites in the Lake Tahoe region contain such a high density of very difficult climbs. Qualities of Cave Rock that create a superior climbing experience include:

- severely overhanging rock that provides extremely challenging climbing;
- route density, many routes in close proximity;
- varied difficulty levels, providing both warm-up climbs and some climbs very near the current human climbing limit;
- solid rock, generally secure holds and safe climbing;
- ease of access, short walk from parking areas;
- ability to climb year-round, due to location and southwestern exposure;
- extraordinary aesthetics/setting and proximity to lake; and
- quick access from Reno and Tahoe area population centers.

While Cave Rock is known as a year-round climbing area, there are preferred seasons of use, and unique patterns of use and users. Generally, the most popular months for local/regular Cave Rock climbers are October, November, March, April, May, and June. During the winter months, climbing depends on the weather, with stormy days stopping most climbing. Climbing usually resumes soon after storms clear. Summer days tend to be too warm during midday, so climbing occurs early and late in the day. During the summer, many other climbing areas become available in the western United States, so many climbers visit those areas while they can. Climbers from out of the area or out of the country have more limited schedules, so may climb during any of the seasons, and probably tend to schedule their extended climbing tours for the summer season. Occasional increases in climbing activity may also happen when notable climbing events are held in the California/Nevada area.

Individual climbers have a variety of visitation patterns at Cave Rock. Certain climbers may practice the moves for one or more climbs over the course of 30 or 40 or more visits in rapid succession, and upon completion of those goals may never return to Cave Rock. Others may visit the area as they pass through on trips years apart. More common among the locals are fairly regular visits during the prime seasons, mixed in with other seasonal outdoor sports and climbing at other areas.

No registration or records have ever been collected at the Cave Rock area, so actual numbers and trends are difficult to assess. On busy weekends, up to 40 visits may be made to Cave Rock. It is rare to encounter as many as 15 or 20 climbers at a time. Occasionally, popular routes may be in such demand that climbers must wait for their turn on a climb, but this has not caused conflict, as climbers tend to climb for about 10 to 15 minutes on Cave Rock's intense routes, then often require rest for as much as an hour before another attempt. Depending upon factors described above, other weekends may see only a handful or no climbers. Mid-week is equally variable, but probably average about 10–15 total visits per week over the year. Total climber visits probably range from 1,100 to 1,500 visits annually. Some climbers have indicated that climbing use has peaked at Cave Rock, and that there appears to be a slight downward trend in use. This trend may fluctuate upward sporadically in the future as awareness of Cave Rock is increased, or as the skill levels of more climbers improve.

International visitors make up an estimated 5% of the climbers at Cave Rock, with a somewhat higher ratio during the summer, and lower international visitation during the winter. Climbers noted that they believe that most or all of these visitors speak and read English. About 40% of the visitors are Americans from out of the area. Locals, including those from the Reno area, comprise at least 50% percent of the total use.

In addition to climbers, non-climbing spectators occasionally approach the rock from the boat ramp to watch climbers. Probably fewer than a hundred non-climbers actually approach the climbing area to spectate each year, and observers are most common during nice weather in the summer. Boaters also occasionally notice the climbers and stay to view the activity. Permanently affixed climbing equipment, including bolts and some quick draws, can be seen at close range, such as within the cave. However, at a distance, the climbing equipment disappears against the rock background and only the climbers themselves appear to other recreationists and sightseers in the area. The climbing equipment in itself is not visible from the road, and it would be difficult to see even if people are climbing. From the boat launching area, equipment would not be seen unless observers were specifically looking for it, and climbing activity in the main cave is noticeable only when the climber swings away from the rock when backing off the route. Climbers can be seen from the launching site on some of the routes on the Lower Cave area. Climbers can also be seen from the lake; the climbing equipment alone is relatively unnoticeable. Even in this case, only some of the routes, and thus climbers on the routes, are visible. Routes below the highway can be seen from the lake and a few routes can be seen from the roadway.

Reports of bungee jumping from the promontory above the lower Cave area apparently stem from the activities of a well-known local climber, who would on occasion jump from the wall of the Lower Cave attached to a climbing rope. After an extended fall, the climber would be caught by his rope and harness. This activity is a highly technical, high-risk sport that does not appear to have drawn much interest from the climbing public. This short-lived stunt was captured in a documentary, and is not known to have occurred recently.

In 1990, the same local climber rearranged the jumble of rocks that made up the floor of the cave. Using small rock and concrete, he created a flat "patio" floor on about half of the area inside the cave. Rocks which had been in unsafe locations for climbers, such as in the "fall zone" of a climb, were moved to safer spots, and large boulders were shifted to create benches in out-of-the-way spots. The natural appearance of the cave floor was altered as conditions were improved for the safety and convenience of climbing activity. (At the same time, reportedly 13 garbage cans full of glass and party refuse were removed.) No permit or other approval for the construction was granted by the Forest Service, and it was not until after completion that the agency became aware of the work.

When the temporary restriction for new bolt placement was issued in 1997, Forest Service personnel placed a metal sign in the fall zone of a popular climb, explaining these regulations. Climbers quickly removed this sign, and propped it up outside the cave entrance, safely away from the climbing routes, but still noticeable to approaching climbers. The sign remains in this location.

Human waste—mostly urine—is sometimes deposited at a small cave to the left/north of the main climbing routes, which has been unofficially designated as the human waste area. Climbers are usually at the climbing area for no more than 4–5 hours, and some use the nearby boat ramp restroom facilities prior to climbing, so human feces is a relatively small problem.

Many climbers have indicated to the Forest Service that they use the Boat Ramp parking lot (paying the $2 fee), and walk the 200 yards up to the Main Cave. Access from the boat ramp is also the primary access to routes below the highway. (Some people mistakenly assume that climbers stage from the trestle road and rappel down. This is not typically the case.) There is also a popular, small pullout slightly north of the tunnel, off of the northbound lane. A larger pullout just north of Cave Rock on the southbound lanes of Highway 50 was closed in the mid-1990s due to safety and access concerns raised by local homeowners. Others park along the subdivision roads south of Cave Rock and walk along the road median. Pedestrians are prohibited from walking through the two tunnels. Climbers moving between the main cave and the north side of Cave Rock must scramble around a frightening but easy traverse around the west side of the rock, following the remains of the old highway trestle. Pedestrian crossing of the highway has the potential to be unsafe, because of high traffic speeds and poor site distance at the tunnels, though there are no known pedestrian/vehicle incidents at Cave Rock. Safety can be increased by crossing the highway at points with adequate site distance.

Cave Rock has a reputation as a safe (i. e, well-protected) climbing area, with the exception of some loose rock on a few routes. These routes are known to either have loose rock or unsafe falls, or where falling rocks would land on the highway or vehicles. At least one major injury associated with climbing activities was caused when a small block of rock was accidentally pulled down by a climber onto his belayer, breaking a leg. Another climber broke both ankles in a fall while developing a climb, which became the stimulus for creating the masonry floor in the cave. Only a few other injuries associated with technical climbing are known to have occurred.

A popular guidebook for the Tahoe Basin, *Tahoe Rock – A Climber's Guide to the Lake Tahoe Basin*, which includes information on the Cave Rock routes, was authored by Mike Carville and published by Chockstone Press in 1992, and is currently out of print. A second printing of this guidebook was published by Chockstone/Falcon in 1999. General climbing ethics are found in this guidebook. Some voluntary guidelines and suggestions for climbing with regard to respecting Washoe spiritual practitioners appear in this new edition.

There currently is no national Forest Service policy or manual direction specifically directed toward recreational climbing activities, including placement of fixed anchors, and new placement of permanent protection has generally been allowed. On the LTBMU, the specific order for Cave Rock is the only place where bolting has been interpreted as damaging a resource. Negotiated rulemaking is currently in progress regarding the appropriateness of fixed-anchor use within designated wilderness areas.

With regard to rock climbing and other public-use activities, the 1996 condition is reflective of today's condition at Cave Rock. Following the determination of eligibility, a determination of adverse effect for climbing was made immediately. That finding of adverse effect resulted in a May 1997 Forest Order prohibiting "damage and defacement" of Cave Rock, which specifically included the installation of new permanent protection in its definition. Under this order, climbing using existing bolts is still allowed. Additional temporary orders using that same language have been in place since then and no violations have been recorded. In fall 1998, the Forest Service mapped all climbing routes and anchors to enable monitoring to continue. Consequently, it is unlikely that the affected environment at Cave Rock has changed in regard to climbing since 1996 when the property was found to have the integrity necessary to be eligible to the National Register.

Climbing activities at Cave Rock have been legally occurring under existing management direction. With the past low level of awareness by the agency and public of Cave Rock's traditional importance, the area was managed as merely an interesting rock formation, where recreation values were accepted.

The Climbing Code

The climbing community has an unwritten code, a set of norms and ethics that guide participants (personal communication, Graham Sanders to Lisa O'Daly). Route pioneers, or first ascenders, are honored by being able to name their routes. (The climbers' offering to number the Cave Rock routes in the guidebook rather than listing the names was a larger offering than it appears on its face.)

It would be inappropriate, under the climber code, for any subsequent user of the route to add a bolt, as this would change the challenge and experience of the route. Even route maintenance would be left to the route's pioneer if she or he lived in the area. The climber code has not, however, incorporated standards regarding installation of rock climbing bolts; there is no widely accepted standard among climbers regarding where and how bolts should be placed.

The issue of bolting has been divisive to the climbing community. Fixed anchors have historically been used on climbs. Technical rock climbing was introduced by Albert Ellingwood in 1916, and since then bolts have traditionally been used by first ascenders. This practice began to change with the advent of the "clean-climbing" ethic of the 1970s, which championed a leave-no-trace mentality. The clean-climbing ethic commits itself to not harming the rock, typically using only runners and chocks for protection. Pitons that were once pounded into the rock were replaced with less invasive placement techniques that generally leave no evidence of passage on the rock. In deep cracks, repeated piton placement can break

away the rock's edges, and it is often necessary to clean dirt or moss out of cracks to ensure the safety of temporary protection. The ethic of "leaving alone what you cannot climb in clean style" is still evidenced by some "clean" climbers, who frown on the installation of permanent protection. Yet, all forms of climbing have their adherents, and sport climbing, and its requisite bolting, is considered a legitimate branch of the sport.

While the actual geological effect from bolt placement on the rock resource is small, the controversy surrounding it is high, especially in areas with high concentrations of routes. It has also led to close scrutiny and regulation by land managers, whereas climbing had previously gone almost unregulated (except in areas like Yosemite, where it is one of the primary forms of recreation).

The climbing community, on the whole, believes that the unique conditions of a climb, and the climber's own personal safety needs, should dictate the equipment needed to protect a climb. Reality dictates that, since climbing is a highly specialized form of recreation, Forest Service managers need the cooperation of climbers to effectively manage climbing. With the climbing community's norms and ethics, reasonable policies could be incorporated into the local ethics and disseminated through climbers' channels of communication to help manage effects.

3.5(b) Environmental Consequences, Including Direct, Indirect, and Cumulative Effects

Evaluation Criteria, Climbing Recreation

The LTBMU Forest Plan directs the Forest Service to manage dispersed public recreation to assure that people may safely and knowledgeably engage in activities in a manner that is compatible with the environment, with other resource activities, and with private land uses (Practices 7 and 8, Dispersed Recreation Management, Summer and Winter, pages IV-22 and 23). A significant recreation effect, then, would be not allowing access to recreational climbing activities where these recreation activities are consistent with the Forest Plan.

Significant Effects Summary, Climbing Recreation

There would be significant effects on recreational climbing from some of the alternatives (see significant effects summary in chapter 2). A detailed analysis of environmental consequences, by activity, follows:

Effects of Proposed Forest Plan Direction on Climbing

In the Forest Plan management direction is provided through management goals, objectives, and practices and prescriptions. Current Forest Plan direction and the proposed management direction for Cave Rock are described in sections 2.2 and 2.3 respectively. Some information is repeated here for convenience.

The General Management Practice (Forest Plan page IV-18) notes that: *In resolving conflicts, the following list of resources or uses are in order of priority and will normally apply:*

a. *Highest priority will be given to the protection of water quality and the enhancement of the clarity of water in Lake Tahoe;*

b. *protection of threatened and endangered species native to the area;*

c. ***preservation of cultural resources determined or believed to be of significance;***

d. *achievement of air quality standards for health, and visibility, and to prevent the adverse impacts of atmospheric deposition upon water quality;*

e. *maintenance of viable populations of wildlife;*

f. *achievement of diverse vegetation communities;*

g. *establishment of a variety of outdoor recreation facilities and uses at a level that assures a 'fair share' of the basin capacity;*

h. *harvesting and treatment of timber stands to maintain health and diversity of the vegetation and to provide for the safety of people and property;*

i. *lowest priority will be given to forage grazing.*

Currently there is no Forest Plan prescription for Cave Rock.

The proposed management prescription, common to all action alternatives, would allocate the area to an Unroaded Recreation management prescription (Prescription 3), which is defined as:

Maintain a natural forest setting for dispersed recreation, wildlife habitat, and watershed protection. Motorized access will normally not be allowed, except where authorized for winter OHV use. Grazing may be allowed where compatible with the primary emphasis. Timber production is not allowed; however, vegetation management may occur to prevent catastrophic losses in the forest. The visual quality objective is retention. The preferred ROS setting is Semi-Primitive, Non-Motorized. (Forest Plan, p. IV-47)

Practice 10–Cultural Resource Management (LMP IV-24) applies to this prescription and allows "Actions to preserve historical, cultural or archaeological values. The primary purpose is to prevent the loss of these socially and scientifically important values. Included are…the protection and enhancement of significant cultural resources."

Under this proposed prescription, recreation use is not emphasized, although the prescription does not prohibit use. The recreation goal found in the Forest Plan—provide opportunities for enjoying a variety of outdoor recreation experiences—would still be applicable, except when prohibited by MA-specific direction, such as under Alternatives 4 and 6. The physical effect of the change would be insignificant; the attitudinal shift it represents, however, emphasizes heritage resource values rather than recreation uses.

The current visual-quality of Cave Rock meets the Partial Retention objective standards, when viewed as middleground, and Modification or Better, when viewed as foreground. These conditions include the colored climbing equipment that hangs on the rock. Conversely, the Unroaded Recreation prescription specifies the visual quality objective as Retention. This is a sensitivity level signifying the highest-level management concern. It requires the repetition of form, line, color, and texture that are frequently found in the characteristic landscape. Thus, changes from the existing condition in size, amount, intensity, direction, and pattern in the landscape qualities should not be evident. The brightly colored slings, shiny

bolt hangers, and carabiners are part of the existing baseline. The improvements described in Alternative 2 (camouflaging equipment) would be a visual rehabilitation activity. Removal of this equipment under Alternatives 3, 5, and 6 would restore the visual quality of Cave Rock.

Rock climbing at Cave Rock uses natural rock holds. The holds used for climbing each of the individual routes can vary slightly depending upon the size and skill of the individual climber, but the best holds will be used by most. Consequently, holds are subjected to hand oils and chalk used by some climbers to prevent slipping. The effect of chalk prints on rock is typically visual. However, Cave Rock naturally contains color variations. In fact, the plugs along the old toll road appear at a distance to be covered with chalk, but upon closer inspection, it becomes clear that it is the natural rock color. Chalk use at Cave Rock has an insignificant visible effect.

The cave floor and the base of the rock, primarily, and the old trestle road, to a minor extent, provide areas for staging climbs. Staging activities include unloading gear and taking breaks, where the ground is durable and vegetation is not impacted. Route devegetation scars, such as from lichen removal, are not evident at Cave Rock. Thus, there is no visual effect on the resource from such uses.

The visual management system does not consider the effects of people and their clothing/personal gear when assessing visual effects.

Effects of the Alternatives on Recreational Climbing

Direct effects on Cave Rock as a climbing resource include the practicality of a climbing ban, maintenance of fixed anchors, the possibility that rock alteration could occur to improve holds, and the possibility of route proliferation.

The extremely difficult nature of climbing at Cave Rock and the lack of opportunities for installation of removable protection has led to the placement of permanent bolts on the routes. Non-permanent slings and caribiners are also usually left attached to the fixed anchors to facilitate climbers securing a rope to catch a fall. By banning the use of bolts at Cave Rock, Alternatives 3, 4, 5, and 6, would effectively ban climbing, because without the protection afforded by fixed anchors, there is often no way to stop a fall or lower to the ground. Of a total of 47 routes at Cave Rock (60 routes if hybrids are counted), only a few routes, e.g., the lower-skill level climbs, can be protected with removable protection. Temporary protection cannot replace use of permanent fixed anchors in these situations, because the rock will simply not accommodate the temporary hardware.

Alternatives 3, 4, 5, and 6 would implement climbing restrictions that would result in a direct and adverse effect on people who engage in this activity. Alternative 2 also affects this group, albeit to a lesser degree. Although Alternative 2 would reduce the effects on the Cave Rock heritage resource by not allowing additional climbing route development that involves installation of permanent protection, it would only provide minimal site restoration through removal of eight routes and about 50 bolts. Camouflaging of anchors would reduce visual impacts, but not eliminate the effect.

In other climbing areas elsewhere in the nation, some climbers have chipped rock to create holds, and have used glue, epoxy, or cement to add holds to the rock. This practice is not in evidence at Cave Rock, nor would it be allowed under any alternative except Alternative 1, under which development of new routes would be allowed. Alternatives 3, 4, 5, and 6 would essentially eliminate climbing, so this manipulation would not occur.

In some climbing areas elsewhere in the nation, the proliferation of routes and the density of bolts create unacceptable effects associated with numbers of participants (parking, sanitation, trampling), as well as visual issues associated with bolts and other equipment. Alternative 2 would respond to the possibility of route proliferation at Cave Rock by restricting new route development. Alternative 1 would not restrict new route development and could lead to an increased route density and additional visual effects from uncamouflaged equipment or from activities such as trampling of vegetation by people or their cars. Alternatives 3, 4, 5, and 6 would essentially eliminate climbing, so increased effects from bolting/climbing route development would not occur.

Indirect effects on and from the climbing resource include effects from spectators, user access trails, and the possibility that climbing could cause rockfall that could affect nonclimbers.

"Spectatorism," or watching climbers pursue their sport, can be an enjoyable activity for recreation visitors. Elsewhere in the nation, the climbing activity has drawn crowds that have resulted in their own environmental effects. Spectator crowds large enough to cause resource effects have not occurred at Cave Rock. Places from which to view climbing activities from land are limited and spectatorism is not expected to increase.

Climbers assume all personal risks associated with climbing; however, falling rock or other objects may endanger nonclimbers. Alternatives 3, 4, 5, and 6 would eliminate this risk over time by removing routes and restricting climbing.

The act of removing fixed anchors (Alternatives 2, 3, 4, 5, and 6) poses a short-term risk of falling rock during the removal activities, but that effect would only occur for a short period of time. If possible, it would be conducted at a time when the highway is closed for road maintenance.

Under Alternatives 3, 4, 5, and 6, climbers would lose a recreation resource that they value.

Effects of Nonclimbing Recreation on Climbing

Other recreation users of Cave Rock have only minor effects on the climbing resource. Most activities are not mutually exclusive, and the low levels of both uses make the current level of activities there not prone to conflict.

Indirect effects on the climbing resource from other recreational uses include the shared access of trails and that the fact that climbers are often blamed for, and often clean up, litter left by other area users. While not significant effects, garbage left by motorists and party visitors have been blamed on climbers. However, climbers who have the skill necessary to climb at Cave Rock generally would not mix alcohol and partying with their sport. There appears to be little connection between climbers and the trash remaining around Cave Rock.

Effects of Native American Spiritual Uses on Climbing

Modern Native American spiritual uses of Cave Rock do not appear to physically affect Cave Rock as a climbing resource. Yet, knowing that climbing there is considered offensive to spiritual practitioners discourages some people from climbing there. In the early 1990s, the Washoe Tribe printed a letter to all

climbers requesting that they not climb at Cave Rock. It is not known whether any climbers have elected to refrain from climbing at Cave Rock in voluntary response to this letter.

Effects of Other Spiritual Uses on Climbing

Other spiritual use of Cave Rock does not appear to directly affect the area's climbing activities.

Effects of Graffiti on Climbing

Human use of any area can result in people who violate regulations prohibiting graffiti. Cave Rock's climbing areas are remarkably free of graffiti associated with climbers; one climbing-related display of graffiti is in evidence. The act of graffiti removal would not affect climbing routes, and the short-term presence of additional people in the area would not significantly affect climbers.

Effects of Commercial Activities on Climbing

Effects on rock climbing from commercial activities would vary depending upon the activity proposed. Currently, there are no special-use permits in effect for the area. No commercial operations would be allowed under any of the action alternatives, eliminating the possibility of rock climbing competitions or organized group events at Cave Rock. No for-profit schools/instruction would be allowed.

Effects of Educational Activities on Climbing

The Forest Service has been informed that two community college classes conduct field trips to the top of Cave Rock. The effects of these activities on Cave Rock as a climbing resource are the same as those described previously for low-impact recreation uses.

Effects of Masonry Flooring and Rock Seating within the Cave on Climbing

The existing masonry flooring and rock benches on the cave floor improve the safety and convenience of climbing activity. Alternatives 1 and 3 would allow this situation to continue, without authorizing additional construction.

Alternatives 2, 4, 5, and 6 propose removal of the masonry floor. This removal activity would require the use of wheelbarrows, sledgehammers, hammers, prybars, etc., and would result in a short-term but intense activity level in the cave. To move the multi-ton boulders again might require a similar come-along rigging system as was employed when they were originally moved. An adverse effect on climbers would be the placement of the large boulders in fall zones for the climbs or in places where they could interfere with belaying. The movement of the boulders should be conducted in cooperation with climbers (Alternative 2) to ensure placement does not affect the safety of future climbing activities.

Effects of Study/Research on Climbing

To complete this FEIS and to further scientific knowledge, the Forest Service commissioned several studies in the Cave Rock vicinity. None of these assessments affected climbing activities, either directly or indirectly.

Effects of Monitoring and Law Enforcement on Climbing

To determine compliance with the Forest Order at Cave Rock, the Forest Service's law enforcement branch routinely patrols the area. Sometimes officers view the rock from the boat ramp with binoculars; other times they hike into the cave. In addition, the agency plans annual assessments of the status of fixed anchors, using the 1998 map as a baseline. Under Alternative 2, it would be very difficult to catch someone in the act of bolt installation. Rather, it is more likely that if illegal bolting had occurred, the activity would be identified during the annual monitoring assessment, or if someone was turned in by another member of the climbing community. Bolts could then be removed and the holes repaired. There is an additional mitigation, outside of what is proposed in the current form of the alternative that could act as a deterrent to bolt installation and increase the odds of successful enforcement. If possession of power drills while at Cave Rock, except for approved maintenance activities, were added as a violation of the Forest Order, then even having the equipment at the rock would result in a citation. It would make possessing the equipment needed to place an illegal bolt an infraction.

None of these law enforcement activities affect climbing that is occurring within the bounds of the regulations.

Effects of Rescue Activities on Climbing

Cave Rock has required rescue assistance from the Tahoe-Douglas Fire Protection District. These activities are necessary for public health and safety and are specifically exempted from Forest Orders that apply at the site. There is a possibility that future rescue activities could require bolt installation to protect rescuers while they perform their duties. In this case, the effects would be the same as described in the climbing section, above. The Forest Service should encourage search and rescue personnel to report new fixed-bolt placements or other route modifications made.

Reasonably Foreseeable Future Actions

As disclosed in section 2.6 of this FEIS, the Forest Service intends to develop a Cave Rock education program (including a signage component), voluntary user registration, and monitoring. Planned educational materials regarding Cave Rock's importance to the Washoe Tribe and the tribe's preference that people avoid the area would serve in essence as an area-wide, year-round voluntary closure. The primary direct effect on recreation use in the area from the education program would likely be a decrease in use. Currently, recreation visitors are uninformed regarding Cave Rock's importance to the Washoe Tribe and the tribe's preference that people avoid the area. There would be a certain portion of visitors who would choose to honor Washoe avoidance traditions, as evidenced by comments heard at the Forest Service 1998 collaboration meetings. Others would choose to go there anyway. A few may even be

attracted by the publicity. Monitoring and visitor voluntary registration would enable the Forest Service to track use patterns and assess future management changes.

Cumulative Effects

To accurately assess cumulative effects, the other primary land use activities going on in the vicinity, not within Forest Service authority to regulate, that may affect climbing are described table 3-5.

Table 3-5. Activities not within Forest Service Jurisdiction in the Vicinity of Cave Rock that may Affect Climbing

Activity	Jurisdiction	Effect
Highway and tunnel maintenance and improvement, including erosion control	NDOT	Maintenance activities occasionally close the road, which can provide the safest opportunity for bolt removal under Alternatives 2, 3, 4, 5, and 6.
Boating	Nevada Division of State Lands	Boating spectators of climbing activities occasionally stop to view Cave Rock.
Parking	NDOT, Nevada Division of State Parks, Douglas County	Limited parking at Cave Rock is the greatest constraint to visitation. This parking is managed by jurisdictions other than the Forest Service, and all parking offers challenges regarding access to Cave Rock, either by distance, steeper trails and highway crossings, walking on the road shoulder or median, or the somewhat precarious walk across the old trestle road.

Since restriction of climbing activities at Cave Rock would amount to the only rock climbing restriction locally, regionally, or nationally, there would be no cumulative effect from the imposition of restrictions.

Other Views of Effects on Cave Rock as a Climbing Resource

The above description of the effects of alternatives on climbing activities represents the view of the majority of the climbers who participated at Forest Service Cave Rock discussion sessions. However, it would be inappropriate to not address alternative viewpoints within the climbing community.

During Forest Service collaboration meetings held in 1998, some members of the climbing community challenged the other climbers to “give” the Washoe Tribe Cave Rock and to climb elsewhere instead.

The September 1997 “Leave No Trace Outdoor Skills and Ethics: Rock Climbing” document provides climber ethics guidelines for cultural and historic resources:

Humans have inhabited North America for millennia and remnants of these ancient cultures have been discovered throughout the country. Many of these places are considered sacred by Native American people. Disturbing cultural sites may render them useless for study and observation in the future, and shows disregard for early American cultures. Even touching rock art can hasten its decay. Federal

regulations protect all archaeological sites and artifacts. Likewise, antlers, fossils, and plants are best left in place for others to enjoy.

Many cultural sites are not immediately evident. Cliff bases may have been prehistoric shelter or camping spots. Look for blackened rocks from ancient fires under overhangs, chert/flint chippings, and evidence of stone or wood structures. Please do not move anything in such places, because context can be just as important to archaeologists as the objects themselves. Report any suspected cultural sites to the land managers or owners.

Under this paradigm, some climbers would interpret that it is important to avoid Cave Rock because of its sacredness to the Washoe Tribe and because of its status as a National Register-eligible heritage resource, such as is described in Alternatives 3, 4, 5 and 6. Closing Cave Rock to climbing would be consistent with this ethic.

3.6 Recreation: General (Nonclimbing)

3.6(a) Affected Environment

Cave Rock's primary non-climbing recreation value is as a unique natural scenic site and for the views it offers of the Tahoe Basin. Prominently standing out on the east shore of Lake Tahoe and visible from most of the lake's shoreline, Cave Rock has long been a natural scenic attraction for Lake Tahoe recreationists since Euromericans began to inhabit the basin in the 1860s. The construction of toll roads through the eastshore around Cave Rock, and the development of waystations, such as Rocky Point House in 1864 just south of Cave Rock, both improved access to the area and doubtlessly generated visitors who would take the short trek to this rocky promontory, and may have camped out, using the cave as protection from the elements.

Cave Rock is bounded on its north and south boundaries by developed or urbanized sites. Two highway tunnels bored through its base have modified its natural appearance. For some recreation visitors, the tunnels have enhanced their recreational experience, while others would have been contented to observe this site in an undisturbed condition. It offers motor-based recreationists (e.g., sightseeing from a vehicle) a unique opportunity to drive through a tunnel along the lakeshore. Those tunnels have also generated effects that are normally deemed adverse to a recreation site, primarily noise. Many people who drive through the tunnels honk their horns; traffic sounds offer an incessant rumble. The presence of the highway has also limited easy, direct access to the base of the outcrop.

In recent years, active recreational use of the National Forest at Cave Rock has been low, relative to nearby Logan Shoals Vista or the Cave Rock boat launch facility. Limited public parking opportunities, the difficult access, and the general lack of knowledge on how to access the site are largely attributed to the lower use numbers. Rock climbing has been the dominant recreation activity (see section 3.5 for additional information on climbing activities). Other observed activities include scenic viewing, hiking, and simply walking out on the rocks to explore the base of Cave Rock. Additional uses include fishing from its base, photography, bird watching, stargazing, general partying, and some mountain biking on the unsurfaced roads to the east of Cave Rock. Cave Rock provides virtually the only public shoreline at Lake Tahoe where people can successfully fish from the edge of the lake. Forest recreation managers estimate non-climbing recreation use for the National Forest at Cave Rock to be 750 to 1,000 visits annually, with recurring visits from local residents.

The current condition of the main cave is well-maintained and trash-free. Remnants of old (1890s to 1960s) graffiti can still be seen on some walls of the cave, with little modern graffiti evidenced. A few fading incidents of more modern tagging are visible, especially around the tunnels' entrances and exits, but they are not extensive, considering the proximity of Cave Rock to established subdivisions, a developed recreation site, and Highway 50. In a conversation with the TRPA's contract archaeologist, the archaeologist who surveyed Cave Rock in the 1950s recalled that in his 1953 visit he noted a great amount of charcoal present on the cave's floor; he attributed much of this to recent campfires and recreational use of the cave (LSA 1998: 64). Campfires in the area are not in evidence as part of modern-day activities.

Since the 1960s, the Cave Rock boat launching facility, operated by the Nevada Division of State Parks, has been a popular recreation site on Lake Tahoe's east shore with an annual average of 148,000 visitors recorded for the last few years. (The all-time high was recorded in 1988 with 180,373 visitors.) This ramp has the lowest fees at the lake and operates at full capacity during the summer months. (LSA 1998: 145) The 85-car parking facility and its double boat launch are open year-round. The numbers of boats launched at the state's Cave Rock site varies, and was approximately 5,000 in 1994, 4,000 in 1996, and 3,000 in 1997. Launching between 1985 and 1989 grew from 2,500 to 5,500. Some visitors to the boat launch never step foot on a boat: they fish from the shoreline, swim, scuba dive, or enjoy the beach day-use opportunity. Most visitors (82%) come to the Cave Rock boat launch between spring and fall, but State Parks keeps it open for use year-round, road conditions permitting.

Nevada park rangers observe that few people access Cave Rock from the public launching/picnic facility. Climbers have indicated that they primarily use this area for parking and access to rock climbing, especially the Lower Cave routes. There is no maintained trail linking the two sites; rather, the trail system is user-created. The approach routes from the State Park (about 200 yards) begin on State of Nevada land and enter National Forest jurisdiction in the immediate vicinity of the rock. Slight erosion is in evidence on these braided trails, although their condition can generally be described as stable. Accessing the main cave from the boat launch parking area requires crossing the southbound lane of Highway 50 in an area where no crosswalk exists. Prudent recreationists cross where site distance is adequate to assess whether traffic is coming out of the tunnel, then walk 10–20 feet on the shoulder of the highway, facing traffic, to the trail up to the main cave. Naturally, not all recreationists are prudent; however, no accidents of this type have been reported.

There are also several small user-created pullouts for parking about 1/4 mile south, as well as 1/4 mile north, of Cave Rock. Approaching from the south, recreationists must walk along the road shoulder (northbound lane) or highway median (having crossed the northbound lane of traffic) as they approach the rock. Crossing the southbound lane is required to access all climbing areas besides the Main Cave and scenic viewing areas along the old Lincoln Highway. Approaching from the north requires crossing both lanes of traffic, with adequate site distance, and either staying on the north side or crossing the exposed lakeside span of the collapsed trestle road. A larger pullout just north of Cave Rock on the southbound lanes of Highway 50 was closed in the mid-1990s due to safety and access concerns raised by local homeowners. The highway median is also closed to parking. Pedestrians are prohibited by regulation from walking through the tunnels.

Access to the summit of Cave Rock from the eastern approach is easy and unchallenging. Parking in the neighborhood, site visitors only have to take a short walk on a native road and scramble up a steep but well-worn pathway to the summit to obtain a view of the lake.

Visible effects from non-climbing recreational uses are relatively minor. Littering is most apparent adjacent to the highway corridor. Only minor amounts of human and pet feces are observed throughout the area. Mountain bike ruts are apparent east of the rock outcrop. The highway generates a substantial amount of noise that detracts from the sense of solitude recreationists might otherwise gain during a visit to the area.

Camping and campfires have not been an issue in the modern history of Cave Rock. Current Forest Service law enforcement personnel, with career histories at the LTBMU that date back as long as 21 years, have never seen a camper or campfire in the area. Forest Plan MA direction (Roundhill) directs the Cave Rock shoreline area to be closed to overnight camping. However, this direction has not been incorporated into any part of the existing camping closure implementing Forest Order in the Lake Tahoe Basin.

Forest Service management of the Cave Rock site has been limited to occasional responses to incidents such as reports of accidents and injuries, and enforcement of the Forest Order. In 1996, four hikers needed to be assisted off Cave Rock by the local fire protection district. In 1991, a man hiking around the base of the rock near the highway slipped and suffered a fatal fall. In 1995, an unusual incident occurred when a parasailer attempted but failed to clear Cave Rock and slammed into it, suffering surprisingly modest injuries. The launching area serves as a vital access point to the lake for emergency medical responses according to the Tahoe-Douglas Fire Protection District. Forest Service law enforcement officers have never witnessed any violations of the Forest Order.

An additional human use at Cave Rock, although not purely recreational, involves classes taught by bona fide educational institutions. Such activities do not require a special-use permit. Two Lake Tahoe Community College courses (Natural History and Geology of Lake Tahoe) are known to have held class field trips to the top of Cave Rock in the past.

No commercial (for profit) special-use permits have been issued at Cave Rock.

3.6(b) Environmental Consequences, Including Direct, Indirect, and Cumulative Effects

Evaluation Criteria, Nonclimbing Recreation

The LTBMU Forest Plan directs the Forest Service to manage dispersed public recreation to assure that people may safely and knowledgeably engage in activities in a manner that is compatible with the environment, with other resource activities, and with private land uses (Practices 7 and 8, Dispersed Recreation Management, Summer and Winter, pages IV-22 and 23). **A significant dispersed recreation effect, then, would be not allowing access to dispersed recreational attractions where these recreation activities are consistent with the Forest Plan.**

Significant Effects Summary, Nonclimbing Recreation

There are significant recreational effects for one of the alternatives (see the significant effects summary in chapter 2 of this FEIS). A detailed analysis of environmental consequences, by activity, follows:

Effects of the Proposed Forest Plan Direction on Nonclimbing Recreation

Currently there is no Forest Plan prescription for Cave Rock as described in section 2.2. The proposed management prescription, common to all action alternatives, would allocate the area to an Unroaded Recreation management prescription. This prescription is defined in the previous section and in chapter 2.

Under this proposed prescription, recreation use is not emphasized, although the prescription does not prohibit recreation use. The recreation goal found in the Forest Plan—provide opportunities for enjoying a variety of outdoor recreation experiences—would still be applicable, except when prohibited by MA-specific direction, such as under Alternative 4. The physical effect of the change would be insignificant; the attitudinal shift it represents is beneficial to heritage resources.

The visual quality objective in the proposed prescription is Retention. Nonclimbing recreation does not effect the proposed visual quality objective at Cave Rock.

Effects of Climbing on Nonclimbing Recreation

The safety of non-climbing users of the National Forest is of concern, if climbers could endanger other forest users by falling rocks. At Cave Rock, rockfall could affect highway users. In addition, climber presence could surprise drivers on the following routes, which are proposed for removal under Alternative 2: (1) all routes to the left (north) of "Bone Crusher", including the routes traversing over the top of the southbound Highway 50 tunnel and "Acapulco", (2) "Trash Dog", (3) "Ton of Bricks", and (4) any other bolts to the right of "Asylum" in the friable rock above Highway 50. The rappel anchors at the top of the first pitch of "Trash Dog" are retained; they are used to complete the route "Pipeline", as are rappel anchors needed to remove the above-described fixed anchors. Removing these routes eliminates the indirect effect of safety hazards to non-climbers using the highway and their vehicles from falling materials from climbing activities. The act of removing the anchors poses a short-term risk of falling rock during the removal activities, but that effect will only occur for a short period of time. If possible, it will be conducted at a time when the highway is closed for road maintenance activities.

Alternatives 3, 4, 5, and 6 would eliminate all fixed anchors over time. Consequently, in the long term, there would be no indirect effects on non-climbers and their property from falling material because of climbing activities. The act of removing the anchors poses a short-term risk of falling rock during the removal activities, but that effect will only occur for a short period of time. If possible, it will be conducted at a time when the highway is closed for road maintenance activities.

In addition, people coming to view Cave Rock as a heritage resource can be offended by climbing activities because it is out of character with the heritage resource values of the site. Visitors knowledgeable of the Washoe tradition of avoiding Cave Rock are likely to be more concerned with the simple presence of climbers than with their visual impact.

Effects of Native American Spiritual Uses of Cave Rock on Nonclimbing Recreation

Modern Native American spiritual uses of Cave Rock do not appear to directly affect low-impact users. Many of these users are not currently aware that Cave Rock is a sacred site and a TCP, and they would be surprised to learn that their presence there is considered offensive to some members of the Washoe Tribe. If Alternative 4 were selected, which would limit public use of the area, there may be a backlash from this group, which did not actively participate in the Cave Rock planning process and may thus be unsuspecting. General recreation use in the area occurred during parts of the period of significance for the Cave Rock TCP, which is why Alternatives 5 and 6 would allow the activity to continue.

Effects of Other Spiritual Uses on Nonclimbing Recreation

Other spiritual uses of Cave Rock do not appear to directly or indirectly affect low-impact uses of the area.

Effects of Graffiti on Nonclimbing Recreation

While reading historical graffiti can be interesting to some recreation visitors, it is unlikely that it would be missed at Cave Rock if it were removed (Alternatives 2, 3, 4, 5, and 6). The low incidence of modern graffiti in the area is a testament that its presence does not encourage additional graffiti.

Effects of Commercial Activities on Nonclimbing Recreation

Effects on recreational uses from commercial activities would vary depending upon the activity proposed. Currently, there are no special-use permits in effect for the area.

Effects of Educational Activities on Nonclimbing Recreation

The Forest Service has been informed that two community college classes have conducted field trips to the top of Cave Rock. They would be prohibited from conducting such activities within the TCP boundary if Alternative 4 or 6 were selected for implementation.

Effects of Masonry Flooring and Rock Seating within the Cave on Nonclimbing Recreation

Without Forest Service authorization and in violation of Forest Service regulations regarding resource damage, a masonry floor was added and rock seating arranged in the cave in the early 1990s. Its current condition offers a comfortable, but developed, setting in the cave. While some visitors would be impressed by its artistry, others would be offended by the unnatural setting.

To remove the masonry floor would require the use of wheelbarrows, sledgehammers, hammers, prybars, and other equipment, and would result in a short-term but intense activity level in the cave. To move the multi-ton boulders again would require a similar come along rigging system as was employed when they were originally moved. Unless a visitor entered the cave during removal activities, it is doubtful that the casual recreation visitor will have strong feelings regarding the status of the cave floor.

Effects of Study/Research on Nonclimbing Recreation

To complete this FEIS and to further scientific knowledge, the Forest Service commissioned several studies in the Cave Rock vicinity. Biological surveys have occurred, a rat midden study is underway, a geological assessment was made, a total inventory of fixed anchors on Cave Rock has occurred, and the TRPA contractors conducted a complete archaeological physical survey of the area. None of these assessments affect (or affected) recreation use, either directly or indirectly.

Effects of Monitoring and Law Enforcement on Nonclimbing Recreation

To determine compliance with the Forest Order, the Forest Service's law enforcement branch occasionally patrols Cave Rock. Sometimes officers view the rock from the boat ramp with binoculars; other times they hike into the cave. Violators of the forest regulations would be ticketed. No tickets have ever been issued. Under Alternative 1, damaging Cave Rock and littering would still be prohibited even upon expiration of the special forest order.

Effects of Rescue on Nonclimbing Recreation

The Tahoe-Douglas Fire Protection District provides rescue services at Cave Rock. To date, such services have benefited nonclimbing recreation users. These activities are necessary for public health and safety and are specifically exempted from Forest Orders that apply at the site.

Reasonably Foreseeable Future Actions

As disclosed in section 2.6 of this FEIS, the Forest Service intends to develop a Cave Rock education program, voluntary user registration, and monitoring. Planned educational materials regarding Cave Rock's importance to the Washoe Tribe and the tribe's preference that people avoid the area would serve in essence as an area-wide, year-round voluntary closure. The primary direct effect on recreation use in the area from the education program would likely be a decrease in use. Currently recreation visitors are uninformed regarding Cave Rock's importance to the Washoe Tribe and the tribe's preference that people avoid the area. There would be a certain portion of visitors who would choose to honor Washoe avoidance taboos, as evidenced by comments heard at the Forest Service 1998 collaboration meetings. Others would choose to go there anyway. A few may even be attracted by the publicity. Monitoring and visitor voluntary registration would enable the Forest Service to track use patterns and assess future management changes.

Cumulative Effects

To accurately assess cumulative effects, the other primary land use activities going on in the vicinity, not within Forest Service authority to regulate, that may affect nonclimbing recreational uses are described in the following table.

Table 3-6. Effects on Nonclimbing Recreational Uses in the Study Area not within Forest Service Jurisdiction

Activity	Jurisdiction	Effect
Highway Traffic/Road Biking	NDOT	While driving and road biking are recreational uses in and of themselves, the primary effect of the highway is to discourage exploration of the rock. It adds an additional danger factor that would keep families a safe distance away. Without the highway, the cave would undoubtedly receive a much higher level of visitation.
Boating	Nevada Division of State Lands	Boating provides an alternative way to view Cave Rock. It is a popular recreational activity. It affects shore use by increasing noise levels in the area.
Boat Launching	Nevada Division of State Parks	The proximity of the boat launch facility attracts more recreationists to the area than would likely be there if the facility did not exist. Yet, low use levels for the National Forest at Cave Rock indicates that high use nearby does not necessarily lead to high use of adjacent land.
Parking	NDOT, Nevada Division of State Parks, Douglas County	The day use facilities offered by the park provide amenities, such as safe parking and restroom facilities, to National Forest users. Shoulder parking and subdivision roadside parking provide a needed service for recreation access at Cave Rock.
Urban Areas, Residential and Commercial	Private	Nearby residential development (Pittman Terrace Subdivision and Cave Rock Estates) has not physically affected the Cave Rock landform.

3.7 Social/Civil Rights Impact Analysis

3.7(a) Affected Environment

Social-impact assessment is the aspect of forest management that considers people's connection to the land and weaves together the interaction of people and ecosystems. People seek a broad spectrum of benefits and values from ecosystems. In the case of Cave Rock, the Washoe Tribe and rock climbers are the two social groups primarily affected by this proposal. This portion of the analysis takes a look at the interests and values embodied in these social groups, the reasons that Cave Rock is of value to them, and the social effects of proposed changes in management direction.

As described in section 3.3, "Heritage Resources," Cave Rock is a core element in the Washoe culture. It is part of their physical, psychological, and spiritual heritage and key to defining who they are as a

culture. The climbers are a recreational group, a collection of people with diverse backgrounds that share a common interest, or in this case, a common activity. Although, Cave Rock is an important physical and geographic feature where they engage in this common activity, Cave Rock does not define who they are and is not central to their heritage.

The Forest Service must not only take care of the land, but also consider the people who value it. Being sensitive to the effects of Forest Service decisions on people is part of the responsibility taken on by the forest supervisor.

The Washoe Tribe

History and culture of the Washoe Tribe related to Cave Rock provide the basis for the area's status as a TCP, and are thus described at length in the TCP portion of the heritage resources analysis in this chapter.

To the Washoe people, Cave Rock is the most important historic property in existence. As a symbol of cultural identity, it is analogous to the Statue of Liberty to U.S. citizens. As the location of important cultural events, one might look to Plymouth Rock or Independence Hall. As a source of Washoe traditional knowledge for Washoe doctors, one might think of Harvard Medical School. The Washoe view this area as the basis, the core, the very substance of their culture. Since the arrival of Europeans in the Lake Tahoe area, Cave Rock has been dramatically altered, its deterioration paralleling the deterioration of the Washoe people, who in the early part of the century were not granted a reservation because they were not thought to even be a viable population. Cave Rock has endured, as have the Washoe, but its integrity has eroded and that deterioration must be arrested if it is continue to convey its importance. To not provide as much protection as possible to this property would have a high and adverse effect to the Washoe people that is incomparable to the effect that eliminating one recreational activity at one location to the much larger American or for that matter international community would have.

Like many Native American properties, Cave Rock possesses inherent sacred and ceremonial components that are most readily perceived by non-Indians as "religious" sites. However, for many traditional cultures there is no distinction between the sacred and the secular realms and the reference to religion is used to translate the traditional culture to modern American terms. Examples of this are found in the first *Tahoe Daily Tribune* article related to climbing issues at Cave Rock entitled "Tribe to Seek Climbing Ban: Washoe Cite Cave Rock's Religious Importance." In the article, the tribe's chairperson states that Cave Rock is "the most religious feature within the Washoe religion." During the 1998 collaboration sessions, many Washoe members repeatedly compared Cave Rock to a church.

For many traditional cultures, the sacred permeates and informs all of life. This fact is recognized in National Register Bulletin 38, which provides guidelines for assessing TCPs and warns against determining a cultural property ineligible to the National Register simply because a culture attributes a religious connotation to it, noting that this criteria consideration is fraught with the potential for ethnocentrism and discrimination. In the case of Cave Rock, the Forest Service gave careful and sympathetic consideration to the significance of the site to the traditional cultural group. The traditional activities at Cave Rock are expressions of the traditional culture and history of the Washoe tribe. The fact that traditional history and culture at Cave Rock are sometimes discussed in religious terms does not diminish the site's historical or cultural significance to the Washoe people.

Statutes and executive orders by the President also guide federal land managers with regard to Native American sacred and religious sites. For example, the American Indian Religious Freedom Act of August 11, 1978, (AIRFA) recognizes the importance of traditional Indian spiritual practices and directs all federal agencies to ensure that their policies will not abridge the free exercise of Indian religions. This law has no specific implementing regulations or mandates of exclusive use. In the case of Cave Rock, the Forest Service has gone to great lengths to obtain and consider the views of Washoe leaders and has never interfered with access to the site by Washoe practitioners.

More recently, President Clinton's Executive Order 13007, *Indian Sacred Sites* (May 24, 1996) directs federal agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sites. It clarifies that these goals shall be furthered to the extent practicable, i.e., where they are permitted by law and not clearly inconsistent with essential agency functions. At Cave Rock, the Forest Service must consider whether there are government-imposed burdens regarding access to, or ceremonial use of, this sacred site.

Some comments made during scoping indicated a belief that a decision to prohibit climbing on Cave Rock would violate the Establishment Clause because it would promote the religion of one group at the expense of the rights of other groups. That concept arises from a misconception of the proposed action, the purpose of which is to protect and preserve the historic and cultural characteristics which made Cave Rock eligible to the National Register. Members of the general public will not be prohibited from visiting and using the site. They will be able to continue their visits to Cave Rock for recreational purposes consistent with the historic period. The preferred alternative will allow the Forest Service to protect the resource while allowing the public to use it for activities that will not impact its heritage values. Other comments indicated a belief that allowing any public access to the site would prohibit the Washoe Tribe's free exercise of their religion. Washoe spiritual practitioners will continue to have free access to the site for the exercise of their beliefs. Thus the preferred alternative complies with both mandates of the First Amendment concerning religion.

The Climbers

Rock climbers are a special interest group with a distinctive lifestyle, attitude, and value system. It is one of the most active and resource-dependent sports that exist. Although non-climbers might perceive climbing activity as conquering the mountain, many climbers view it as "making communion with vertical places" (Child 1994). They describe a "spiritual" side of climbing: climbing as testing oneself, climbing as nourishing their spirit, climbing as a connection to the mountain (Rockwell circa 1995). Climbers tend to perceive themselves as environmentalists (Davidson 1994), as individuals with deep concern for the land.

Although rock climbers' connection with Cave Rock span just over a decade, the site is of high value to them (see section 3.5 of this document). The area essentially grew with the advent of sport climbing, and it has been established among the climbing community as one of the highest-rated climbing routes in North America (LSA 1998: 137). Route pioneers at Cave Rock include some of the best and most-respected individuals in the sport. Tom Herbert, Steve Schneider, and Dan Osman, some of this generation's most renowned climbers in the world, pushed the limits of sport climbing with the overhanging routes they developed at Cave Rock. Their work on routes at Cave Rock contributed to their international fame and international publicity regarding climbing at Cave Rock.

Rock climbers are not represented by a single entity, which can make communication difficult. The Access Fund, a nonprofit group formed to ensure access to climbing areas, is the most representative group, but even it does not represent all climbers on all issues. The Access Fund position on climbing at sacred sites maintains that if the climbing community chose never to climb on certain crags out of respect for Native American beliefs, they will support that position; however, they will work to make sure that, absent broad agreement over such a gesture, those climbers who choose otherwise will not be penalized (Sam Davidson, personal communication 1997).

When faced with giving up a place that they value, many climbers have banded together, with the assistance of national climbing advocacy organizations, to seek a solution that preserves their access privileges. The "Climbers' Alternative" (see appendix A) presented at the Cave Rock meetings in 1998 was an attempt to do just that.

The current situation at Cave Rock mirrors social conflicts currently being played out throughout the nation, where Native American traditional values conflict with the interests of some of the recreating public on public lands. Devil's Tower, Rainbow Bridge, Hueco Tanks—the list of sacred sites with recreation use conflicts grows as the population increases and public lands serve as the playground for an ever-increasing variety and number of recreation uses and users.

3.7(b) Environmental Consequences, Including Direct, Indirect, and Cumulative Effects

Evaluation Criteria, Social

The LTBMU Forest Plan's social goals tend to focus on the contribution of recreation programs and tourism to the local economy. This direction does not apply to the situation at Cave Rock. Instead, the tests provided in executive orders and case law will provide the criteria for significance of effects. **A significant social effect, then, will occur if (1) federal land is provided for the exclusive use of a particular religious group to the exclusion of other groups; (2) other users will be required to conform their conduct to the religious practices or cultural concerns of another group; (3) there will be a high and adverse environmental effect to the Washoe Tribe; or (4) government-imposed burdens exist at Cave Rock regarding Washoe tribal access to, and ceremonial use of, the sacred area.**

Significant Effects Summary, Social

There are significant social effects from implementation of some of the alternatives (see summary of significant effects in chapter 2). A detailed analysis of social environmental consequences follows.

1. Federal land is provided for the exclusive use of Indian religious practitioners.

According to a December 18, 1996, letter from Alice Baldrica of the Nevada SHPO to Forest Supervisor Robert Harris, the continued presence of climbers "may affect the ability of Washoe religious

practitioners to use Cave Rock. Because it is unknown when practitioners will be called to Cave Rock, a predictable schedule for use is impossible to create. Consequently, the tribe requests exclusive use by traditional Washoe practitioners in honor of their cultural traditions.

Alternative 4 provides this remedy requested by the tribe. This alternative excludes public use of Cave Rock to protect traditional use of the TCP. This would be a significant effect on the public. Public use of federal land would be prohibited to protect traditional cultural practices. Certain man-made intrusions over which the Forest Service has no management control, such as the highway tunnels, would remain. However, to eliminate public use entirely would mean that the general public would lose a recreation resource that they value.

The remaining Alternatives 1, 2, 3, 5, and 6 do not provide for exclusive use of federal land and therefore do not constitute a significant effect under this criterion. Alternatives 1 and 2 would rely on the climber's vacating the area if a Washoe practitioner comes to Cave Rock for spiritual purposes. While this solution may provide practitioners with the privacy they seek, they are initially confronted with an activity that they consider a desecration and they have the burden of interrupting their practice to ask individuals to leave. Further, it is uncertain when the actual ceremony starts, as the traditional practices are secret. Disturbance of doctors during these ceremonies is traditionally believed to cause sickness, death, or other harmful effects on the doctor, his family, his patient, other Washoe people, or the person disturbing the ceremony. Consequently, by the time the practitioner encounters a climber, who subsequently vacates the area, the contact between the two may already have led to perceived ill effects. Practitioners have not verified or negated this possibility. Alternatives 1, 2, 3, 5, and 6 all present the possibility that tribal members may encounter a nonclimbing recreationist when they come to Cave Rock to practice or during their ritual.

Alternatives 3, 5, and 6 are compromise solutions. Neither of the groups who most value Cave Rock would achieve what they have expressed as their ideal conditions at the site. Climbers would not achieve their goal of continued access and the Washoe would not achieve their ultimate goal of exclusive use. Although these alternatives would eliminate climbing either over time or immediately, they also continue access to the general public. The Forest Service is aware that for some members of the Washoe Tribe the Cave Rock issue does not allow for compromises; however, the site is used for sacred practices in its current condition. Alternative 6, eliminating only one activity, was selected as the preferred alternative because it continues to allow great access to the general public.

2. Third parties will be required to conform their conduct to Indian religious or cultural concerns.

Alternatives 3, 4, 5, and 6 eliminate the activity of climbing. In addition, as explained previously, Alternative 4 restricts all access beyond that of the Washoe practitioners. Eliminating specific activities and public access could be construed as requiring others to conform their conduct to Indian cultural concerns. However, land use managers frequently control certain activities on sensitive lands for the purpose of protecting environmental, historical, or cultural resources. Examples of activity restrictions for resource protection include:

- restricting motorized access to historic trails to preserve the historic scene;
- restricting mountain-biking on specific trails (i.e., Pacific Crest Trail) or specific land-use areas (i.e., wilderness areas) to protect the experience of other users and protect environmental resources;

- restricting climbing on rock escarpments used by peregrine falcons for nesting habitat; and
- restricting off-highway vehicle use to protect other trail users and protect natural resources,
- limiting snowmobiling to resolve environmental and user conflicts.

In this case, the Forest Service has chosen the end of Henry Rupert's life as the benchmark to manage toward. Activities introduced to the management area after this date affect the area's historic values and will be restrained.

3. There will be a high and adverse environmental effect on the Washoe Tribe.

To the Washoe people, Cave Rock is simply the most important historic property in existence, extant or not, in federal control or not. As a symbol of cultural identity, it is analogous to the Statue of Liberty to U.S. citizens. As the location of important cultural events, international analogies must be sought such as the Sea of Galilea or Mount Sinai. As a source of Washoe traditional knowledge for Washoe doctors, one might think of Harvard Medical School. The Washoe view this area as the basis, the core, the very substance of their culture. Since the arrival of Europeans in the Lake Tahoe area, Cave Rock has been dramatically altered, its deterioration paralleling the deterioration of the Washoe people who in the early part of the century were not granted a reservation because they were not thought to even be a viable population. Cave Rock has endured, as have the Washoe, but its integrity has eroded and that deterioration must be arrested if it is continue to convey its importance. To not provide as much protection as possible to this property would have a high and adverse effect to the Washoe people that is incomparable to the effect that eliminating one recreational activity at one location to the much larger American or for that matter international community would have.

As stated previously, without protecting and restoring the setting, feel, and association of the TCP, Cave Rock could lose it meaning to the Washoe Tribe. It could become a place that once was important to the tribe, rather than a place that is still culturally significant. The case that Washoe practitioners use the site to continue their traditions is a key component of the eligibility of Cave Rock as a TCP.

Alternative 1 is unresponsive in addressing this concern. Alternative 2 would preclude additional physical effect on Cave Rock and removes select climbing routes. These actions would reduce (by less than 50%), but not eliminate, the adverse effect caused by the climbing. Washoe Tribe representatives at Forest Service collaboration meetings indicated this solution could be construed as wholly unsatisfactory in that the site is either desecrated or it's not. Allowing some desecration – such as a single climbing bolt – has been represented as just as intolerable as the totally unregulated situation. On the other hand, some climbers represented at the 1998 collaboration meetings and the Access Fund indicated that they are willing to compromise to protect their access. As a community, they are generally accepting of Alternative 2 even though they would lose some of the existing routes there and freedom to bolt new routes.

Alternatives 3, 5, and 6 would minimize (by more than 50%) the adverse effect to the Washoe Tribe. Alternative 6 was selected as the preferred alternative because it would begin the restoration of setting, feel, and association of the TCP as soon as possible.

4. Government-imposed burdens exist at Cave Rock regarding Washoe tribal access to, and ceremonial use of, the sacred area.

Whether government-imposed burdens exist at Cave Rock for ceremonial use of the area is alluded to in the December 18, 1996, letter from Alice Baldrica of the Nevada SHPO to Forest Supervisor Robert Harris. The letter states that the continued presence of climbers "may affect the ability of Washoe religious practitioners to use Cave Rock." Under Alternative 2, practitioners would have the burden of asking climbers to voluntarily leave while they conduct their ceremony. As voiced during collaboration meetings and stated in the written comments on the DEIS, Washoe elders may be intimidated to ask young climbers to leave the area. As stated previously, it is unclear when the actual ceremony begins and interrupting the practice may be unacceptable. Alternative 6 would not eliminate the possibility of a Washoe practitioner encountering another visitor, however reduced recreational attractions and inconvenient access to Cave Rock greatly reduces the likelihood of encountering large numbers of people.

Traditional practitioners and recreationists share parking facilities. This parking is managed by jurisdictions other than the Forest Service, and all parking offers challenges regarding access to Cave Rock, either by distance, steeper trails and highway crossings, walking on the road shoulder or median, or the somewhat precarious walk across the old trestle road. Because traditional Washoe practitioners are often tribal elders, parking to access Cave Rock offers impediments that adversely affect these members of the tribe. One practitioner was ticketed when parking in the highway median, an illegal activity. Consequently, there are burdens regarding access for tribal elders to Cave Rock, because there is no easy, convenient parking for elders to access the area; however, these are not burdens over which the Forest Service has the authority to regulate.

Cumulative Effects of Social/Civil Rights

The continued increased recreational use of Cave Rock represents another in a long line of events and activities that have pecked away at the viability of the Washoe culture. The tribe was removed from their ancestral land in the 1800s, isolating them from the resources on which they had thrived for millennia and requiring them to abandon many of their traditional lifeways. Sent to government schools where their traditions were discouraged, their culture had to endure in secret. In the 1920s, the tribe was considered to not need a reservation, because they were nearly extinct. Throughout this time, Cave Rock has endured as a symbol of Washoe culture that has also been battered by the construction of roads, tunnels, boat ramps and increasing recreation use. Each additional impact on Cave Rock further deteriorates not only the Cave Rock TCP, but adds another straw to the burden that threatens the viability of Washoe culture as a whole.

Conversely, rock climbers represent a very small portion of the dominant culture, and climbing is a recreational activity that is relatively recent in history, with less than 20 years of use at Cave Rock. Rock climbing restrictions are virtually nonexistent on public lands and do not present a cumulative effect on the climbing community locally, regionally, or nationally.

3.8 Wildlife

3.8(a) Affected Environment

A Biological Assessment/Biological Evaluation (BA/BE) has been prepared to fulfill the requirements of the Endangered Species Act (ESA) (PL 93-502, as amended). The BA/BE analyzes the proposed action's effects on species federally listed as threatened, endangered, or proposed, and listed by the Forest Service as sensitive. Within the Cave Rock study area this includes the federally listed endangered peregrine falcon (*Falco peregrinus anatum*), federally listed threatened bald eagle (*Haliaeetus leucocephalus*), and the Forest Service listed sensitive pallid bat (*antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii*). This section summarizes the effects findings. In addition, it assesses effects of alternatives on key wildlife species with habitat at Cave Rock.

Habitat

Cave Rock is a highly visible terminus of one of many ridges extending west from the crest of the Carson Range to the shores of Lake Tahoe and below. Its abrupt vertical drop to the water's edge and extension above and beyond its adjoining shorelines make it one of the most prominent features along the lake's eastern shore. The south and west aspects of Cave Rock are predominantly sheer rock faces with little or no vegetative cover. The contour of the barren south and west aspects is such that the sun's solar heat is readily captured and reradiated. Vegetation across the top and descending down the jagged, less extreme north slope is predominantly that of mountain mahogany (*Cercocarpus ledifolius*) and bitterbrush (*Purshia tridentata*), joined by Ponderosa pine (*Pinus ponderosa*) as it recedes upslope. Several considerably smaller, less pronounced rock outcrops are present upslope, along with a residential subdivision. The Cave Rock boat launch is located just below the southwest extension of Cave Rock with a number of small commercial and residential dwellings continuing south along the highway corridor beyond the boat launch.

The predominant habitat attributes of Cave Rock are those of an extensive network of cracks, crevices, small rock ledges, and a shallow cave in the southwest corner of the rock above northbound Highway 50. Occupancy and/or frequent use of Cave Rock by wildlife is largely limited to bats and a few avian species.

Species Accounts

Special-Status Species

Species considered for this analysis were identified through contacts with the U.S. Fish and Wildlife Service (USFWS), TRPA, Nevada Division of Wildlife (NDOW), Nevada Natural Heritage Program, and the Predatory Bird Research Center at UC Santa Cruz. Occurrence records for the LTBMU Forest Service and other reference materials were reviewed for documented species occurrences. Field visits and bat surveys were conducted to evaluate habitat conditions and species presence.

The following is a list of those species having known occurrences or the potential to occur within the Cave Rock analysis area that will be considered during this analysis. There are no other species federally

listed as threatened, endangered, or proposed; Forest Service sensitive or Management Indicator Species (MIS); TRPA special-interest species; or state-listed plant or animal species occurring at Cave Rock that could be potentially affected by recreational activities on Cave Rock.

Federally listed endangered:	Peregrine falcon (*Falco peregrinus anatum*)
Federally listed threatened:	Bald eagle (*Haliaeetus leucocephalus*)
Forest Service listed sensitive:	Pallid bat (*Antrozous pallidus*) Townsend's big-eared bat (*Corynorhinus townsendii*)
TRPA special interest species:	Osprey (*Pandion haliaetus*)

Other Species

Birds

Common raven (*Corvus corax*), rock dove or pigeon (*Columbia livia)*

Bats

Spotted bat (*Euderma maculatum*), fringed myotis (*myotis thysanodes*), Yuma myotis (*Myotis yumanensis*), long-eared myotis (*Myotis evotis*), western pipistrelle (*Pipistrellus hesperus*), long-legged myotis (*myotis volans*), California myotis (*Myotis californicus*), small-footed myotis (*Myotis ciliolabrum*), big brown bat (*Eptesicus fuscus*), Western mastiff bat (*Eumops perotis*), Mexican free-tailed bat (*Tadaria brasiliensis mexicana*).

Species Occurrence Highlights

The two most obvious species occupying Cave Rock at present are the common raven and the rock dove, or pigeon, as it is more commonly known in urban environments. Both of these species nested and successfully fledged young at Cave Rock in 1998 and 1999. In 1941, an active peregrine falcon eyrie was documented at Cave Rock, but no other documented occurrences are known. Bald eagles are present throughout the year at Lake Tahoe, and individual birds have reportedly been observed infrequently perching on Cave Rock by members of the public. Ospreys have also been observed flying near Cave Rock but there is no documented or reported actual use of Cave Rock itself by this species.

Several bat species have the potential to occur in and around Cave Rock, either because of the extensive network of cracks and crevices, which provide an abundance of suitable roosting habitat, or because of foraging opportunities associated with its proximity to water and the warmth generated from the capture and reradiation of the suns rays, particularly on the south and west aspects of Cave Rock.

Summary by Species

Birds

Peregrine Falcon (*Falco peregrinus anatum*)

An active peregrine falcon eyrie was documented on the south face of Cave Rock by Tom Trelease of the NDOW in June of 1941 (Trelease pers. comm.). No other documented occurrences are known for Cave Rock prior to or after 1941. Ryser (1985) noted Pyramid Lake and Walker Lake as the only two known or suspected peregrine nestings for western Nevada, with the last reported nesting occurring in northeastern Nevada in 1949. At present, five or six active eyries are known for eastern Nevada due to re-introduction efforts in two different mountain ranges (Heron pers. comm.). In California, the number of known eyries has grown from two in 1970 to between 140 and 150 in 1997. It is estimated that this may represent less than half of the actual number for the state of California (Walton pers. comm.), as funding and subsequent survey efforts have diminished in recent years. Attempts to re-introduce peregrines at the south end of Lake Tahoe from 1986 to 1988 and again in 1991–92 did not result in any active eyries at this site. Neither the NDOW, nor the Predatory Bird Research Center at UC Santa Cruz, which coordinates peregrine falcon recovery efforts for the Sierras, consider Cave Rock as a potential re-introduction site. In fact, no future re-introduction efforts are anticipated for Cave Rock or elsewhere in the Sierras (Walton pers. comm.). Peregrines are known to disperse as far as 175 miles from natal and/or release sites, which in the future could potentially lead to an unassisted establishment of an eyrie in the presently unoccupied Lake Tahoe Basin. The likelihood of dispersing birds establishing an eyrie at Cave Rock is low, due to the heavy flow of traffic passing through its tunnels, watercraft use associated with the launch at its base, and the commercial and residential development in the surrounding area.

Bald Eagle (*Haliaeetus leucocephalus*)

Reproduction of bald eagles was confirmed at Lake Tahoe for the first time during this century in 1997 on State Park lands along the southwest shore of Lake Tahoe in California. Reproduction was also documented at this site in 1998. In 1999, the adult pair was present at the site, but reproduction did not occur (Laves pers. comm.). It is speculated that bald eagles nested at Lake Tahoe in the 1930s, but there is no supporting documentation. The discovery of a nest at Eagle Point of Emerald Bay in the winter of 1970, along with the presence of two adult and one or two subadult birds perching near the nest site during that winter also led to speculation that reproduction had occurred. Reproduction was not confirmed, however, and the presence of wintering bald eagles at this site in subsequent years up to 1976 resulted in no confirmed reproductive efforts. The only other documented site location for nesting bald eagles at Lake Tahoe dates back to 1877, when a pair nested along the west shore near Homewood. Nesting was also reported along the west shore in 1874 and 1875, which may have been the same site, although the location is uncertain.

A second pair territory is known to exist in the northeastern region of the lake on the Nevada side, with no documented reproduction at this site. In 1997, a bald eagle pair hatched but failed to successfully fledge young at Lahonton Reservoir in Nevada approximately 50 miles east of Lake Tahoe, which was the first documented bald eagle reproduction in Nevada for this century. Reproduction occurred again at this site in 1998 and 1999. Linsdale, in *Birds of Nevada* (1936), reported bald eagles nested on the main island (Anaho) of Pyramid Lake in 1866, which is the only other documented reproduction for the state. In California, known bald eagle nest sites have continued to increase, from 32 in 1977 and 93 in 1990 (Golightly1991), to 142 in 1997 (Jurek pers. comm.).

Surveys for wintering bald eagles have been ongoing at Lake Tahoe since the early 1970s and overall it appears there has been a slight increase in the number of wintering birds as well (Metsah pers. comm.).

These 1-day survey efforts are not sufficient to predict population trends, as winter migration can be influenced by a number of factors, and variable weather conditions can influence the number of birds observed.

Cave Rock is not a significant habitat component to bald eagles. Unlike osprey, bald eagles demand more isolation from human activity to breed successfully. The sheer number of cars and trucks passing through the tunnels of Cave Rock, the watercraft activity associated with the boat launch at its base, and the urban surroundings create a human disturbance level beyond that which bald eagles are known to tolerate. Additionally, Cave Rock does not provide the large ledges necessary to accommodate a bald eagle nest and a nest on top of Cave Rock would be subject to avian and terrestrial predators.

Golightly (1991) used a number of criteria to describe potential bald eagle roosting and nesting habitat within the Lake Tahoe Basin. For nesting this included 1) proximity to water, 2) presence of forest, 3) presence of dominant trees, and 4) disturbance. The criteria for roosting habitat which has been studied extensively elsewhere included: 1) having a favorable microclimate, 2) being close to food sources, 3) being in relatively undisturbed areas, 4) being traditionally used year after year, and 5) being in forested areas with larger trees than surrounding areas. Since the criteria are essentially the same for nesting and roosting habitat, stands containing nest trees were considered suitable for roost sites.

Based upon these criteria, Cave Rock has low suitability as bald eagle nesting and/or roosting habitat. Cave Rock is in close proximity to water, but residential and commercial structures are scattered throughout the surrounding area, there are no large trees on Cave Rock and few dominant trees in the surrounding area, it is directly exposed to easterly winds blowing across the lake offering little protection during harsh winter conditions, it is in a high-disturbance area from both vehicular and watercraft traffic, and there are no records of traditional use.

The presence of ravens at Cave Rock and the surrounding rock outcrops may also deter bald eagles from utilizing Cave Rock during the reproductive period. Instances have been noted where ravens and other raptors, including eagles, have successfully nested in fairly close proximity to each other; however, ravens are also known at times to displace or outcompete raptors when available nest sites are limited.

Osprey (*Pandion haliaetus*)

Known to occur worldwide, only one of the five subspecies, *Pandion haliaetus carolinensis*, is found in the United States. Osprey are not year-round Tahoe residents, and begin migrating north to nesting areas in mid-March and early April. Nesting occurs solitarily or in small, loose colonies. Nests may be over a mile away from huntable waters, although nests are more typically located in snags or trees near water. Osprey have also been known to nest on cliffs, on the ground, and on man-made structures (e.g., power poles). Pair bonds and nest site fidelity are typically maintained year after year. Egg laying may occur as early as late April, but may extend into June with young fledging in late July and early August. Young remain dependent upon their parents for another 4 to 8 weeks before departing to winter grounds in mid-September through October. The diet of ospreys is comprised almost exclusively of fish, although mammals, birds, reptiles, and amphibians may also be eaten.

The osprey experienced population fluctuations similar to the bald eagle and peregrine falcon since the end of World War II due to widespread environmental contamination by pesticides and industrial pollutants. Although the osprey was not listed under the ESA, habitat protection measures and stricter regulations on the use of chemical pollutants have allowed osprey populations to increase substantially. The first recorded nesting attempt by osprey at Lake Tahoe occurred in 1976 and has since increased to 11 known nest sites in the Lake Tahoe Basin.

Osprey have been observed flying in the vicinity of Cave Rock, but there are no known occurrences of use of Cave Rock as either perching or nesting habitat, either historically or in recent times. Although osprey have been known to nest on cliffs and the ground upon occasion, the likelihood of osprey utilizing Cave Rock as either nesting or perching habitat is very low due to the various disturbances (such as highway traffic) and poor habitat suitability.

Common Raven (*Corvus corax*)

The common raven is widely distributed over the northern hemisphere in Eurasia, Africa, North America and Central America. In the United States it is mainly confined to the West. The raven is an opportunistic nester and scavenger commonly found at the periphery of urbanized areas or in open, uninhabited country. In addition to cliffs and rock outcrops, ravens also make extensive use of telephone and powerlines for perching and nesting. Ravens have been documented nesting in close proximity to a variety of raptors, but they also compete with raptors for suitable nest sites. The omnivorous diets of ravens utilize a wide variety of animal food and some plant food. As both predator and scavenger, ravens kill a variety of live game and readily utilize available carrion. Ravens are also recognized as a major predator on the eggs and young of many avian and terrestrial species. Ravens are granted protection from direct persecution under the Migratory Bird Treaty Act of 1918.

Rock Dove, or Pigeon (*Columbia livia*)

This species is native to Eurasia and North Africa but not North America. Rock doves were domesticated thousands of years ago and several hundred different kinds of domestic pigeons were developed through selective breeding. In time, humans spread the rock dove over much of the world. Feral or free-living populations became established in cities and agricultural areas by escape or release, but the history of their origin and spread throughout this country is poorly known. Rock dove populations are common within cities and towns as with most ranches and farms. There are also sites where rock doves live away from the presence of humans, often nesting in fissures and crevices on cliffsides. Rock doves are not considered migratory and have no protection under the Migratory Bird Treaty Act.

Bats

Thirteen species of bats were identified as having the potential to occur at Cave Rock based upon the presence of suitable roosting and/or foraging habitat and known distributional ranges. Of these 13 species, only the Townsend's big-eared bat is considered a cave/cavern-dependent species, while the pallid bat, western pipistrelle, and western mastiff bat are recognized as cliff-dependent species. The remaining nine species identified as having the potential to occur are recognized as utilizing multiple roost types.

Acoustic surveys were conducted at Cave Rock in coordination with the Forest Service Pacific Southwest Region (R5) bat coordinator from April 24 through 26, and again June 26 and 27, 1998. Based upon the range of vocalizations, the survey efforts confirmed the presence of four different species, including the pallid bat, long-eared myotis, fringed myotis, and western pipistrelle. In addition, recorded vocalizations detected anywhere from two up to potentially six other species that could not be distinguished due to the overlap in their range of vocalizations. Detections in the 20–30 kHz range may be either the Mexican free-tailed bat or big brown bat, or potentially both. Detections in the 40–50 kHz range could represent one or any combination of the four species within that range including the California myotis, small-footed myotis, Yuma myotis, or long-legged myotis. It should be noted that acoustic surveys are limited to detecting the echolocation calls of actively foraging bats only, which leaves the possibility that some detections may represent individuals that traveled from other roost sites to forage at Cave Rock.

Determining reproductive status would require netting and inspecting females for signs of pregnancy or lactation. To confirm the location of maternal roosts would necessitate fitting females with radio transmitters. Obtaining a representable sample of individuals would be difficult at Cave Rock due to the height of the sheer rock faces and the difficulty of access. The netting, handling, and fitting with radio transmitters could result in injury or death to individuals and ultimately their young. For species such as the pallid bat and Townsend's big-eared bat, which are both Forest Service sensitive species, and tend to occur in low numbers, these practices could significantly affect target populations.

Bats have two basic behavior requirements, roosting and foraging. Roosting can be further divided into day roosts, night roosts, maternity roosts, and winter roosts or hibernaculums. Most species of bats have specific roost requirements for temperature, humidity, access, dimensions, and height from the ground. These environmental parameters vary with the season and reproductive status. In general, the parameters for suitable day roosts and night roosts are much broader and the consistency and/or frequency of use more variable than that of maternity roosts or hibernaculums. The type of habitat selected for day and night roosts has greater variability between species and even among individuals within a species. Selection for maternity colonies and winter hibernaculums, on the other hand, tends to be less variable with a greater dependency upon specific microclimate conditions. If left undisturbed, maternity roosts and hibernaculums are often used throughout the life of an individual and used from generation to generation.

Foraging habitat in close proximity to roosting areas is a requirement for most species although some, such as the Mexican free-tailed bat, regularly travel many miles between suitable caves and foraging areas. Water sources are commonly used for foraging, particularly in the more arid regions, as they tend to concentrate insects and, therefore, bats. Bats' forage habitat preferences also reflect the individual bat species' specialization on different kinds and sizes of insects. Pallid bats, e.g., feed predominantly on ground-dwelling arthropods, such as scorpions and sphinx moths, which they can catch on or near the ground in open areas such as grasslands. Species such as little brown bats that hawk mosquitoes and similarly-sized aerial insects, often feed over water sources.

Pallid Bat (*Antrozous pallidus*)

A member of the family Vespertilionidae, this bat is distributed from southern British Columbia and Montana to central Mexico, and east to Texas, Oklahoma and Kansas. An isolated population also occurs on Cuba. Pallid bats occur in a variety of habitats including rocky arid deserts, shrublands, grasslands, coniferous forests. This species is most abundant in the arid Sonoran life zones and open, dry habitats that contain rocky areas for roosting. In California, where it is a species of special concern, it is usually found in low to middle elevations below 6,000 feet, but has been found up to 10,000 feet in the Sierra Nevada. Pallid bats are not known to migrate but rather are yearlong residents in most of their range where they hibernate in the winter near their summer roost. They are believed to hibernate as solitary individuals or in small numbers.

Pallid bat day roosts may vary but are commonly found in rock crevices, tree hollows, mines, caves, and a variety of man-made structures, including vacant and occupied buildings. Tree roosting has been documented in large ponderosa pine snags, inside basal hollows of redwoods and giant sequoias, and bole cavities in oaks. They have also been reported roosting in stacks of burlap sacks and stone piles. Roosting sites are usually selected near the entrance of the roost in twilight rather than total darkness. The site must provide protection from high temperatures as this species is intolerant to roosts in excess of 104˚F. Pallid bats are also very sensitive to roost-site disturbance. Night roosts are usually more open sights and may include open buildings, porches, mines, caves, and under bridges.

Pallid bats are gregarious, often roosting in colonies from 20 to several hundred individuals. Pregnant females gather in maternity colonies within warm rock crevices, abandoned mines, caves, hollow trees and in cavern-like building features such as attics. Females generally give birth between May and July with twins being most common. Maternity colonies disband between August and October.

They are primarily insectivorous, feeding on large prey that are taken on the ground or sometimes in flight. Prey items commonly include flightless arthropods, such as scorpions, ground crickets, and cicadas.

Townsend's Big-Eared Bat (*Corynorhinus townsendii*)

This bat occurs throughout the west from the southern portion of British Columbia south along the Pacific Coast to central Mexico and east into the Great Plains, with isolated populations occurring in the south and southeastern United States. Habitat associations include desert, native prairies, coniferous forests, riparian communities, active agricultural areas, and coastal habitats. In California, the species is typically found in low desert to mid-elevation montane habitats, although sightings have been reported up to 10,800 feet. Distribution is strongly associated with the availability of caves and cave-like roosting habitat with population centers occurring in areas dominated by exposed, cavity-forming rock and/or historic mining districts. The Townsend's big-eared bat is a year-round resident in California, and the Mother Lode country of the Sierra Nevada foothills has been known historically as the heart of concentrations for the species.

This bat often roosts on open surfaces making it readily detectable. It is often the species most frequently observed (commonly in low numbers) in caves and abandoned mines throughout its range. It has also been reported to utilize buildings, bridges, rock crevices, and hollow trees as roost sites. Summer maternity colonies form from March to June and range in size from a few dozen to several hundred individuals. A single pup is born between May and July. Males remain solitary during the maternity period, but winter hibernating colonies are mixed-sex groups which can range in size from a single individual to several hundred animals. It hibernates throughout its range in caves and mines where temperatures are less than 55˚F, but generally above freezing. Seasonal movement patterns of this species are not well understood, although there is some indication of local migration, perhaps along an altitudinal gradient. Townsend's big-eared bats are highly sensitive to roost disturbance.

Big-eared bats generally begin foraging well after dark with most foraging occurring in edge habitats along streams and areas adjacent to and within a variety of wooded habitats. These bats often travel considerable distances while foraging, with movements of more than 10 miles during a single evening. Flight is slow and maneuverable, with the species cabable of hovering and gleaning insects off foliage. Big-eared bats are moth specialists with over 90% of their diet composed of lepidopterans.

The Townsend's big-eared bat was not detected at Cave Rock and there are no known occurrences for the surrounding area. Although Cave Rock is within the elevational range of the species and suitable habitat features do exist, its strongest habitat associations are with caves and mines which are lacking in the Lake Tahoe area. The high sensitivity of this species to disturbance may preclude the it from utilizing the shallow cave, even in the absence of human presence, due to the high traffic volume of Highway 50 below its mouth, and the heavy use it receives from rock doves. The extensive network of cracks and crevices provides suitable habitat features that Townsend's big-eared bats are known to use to a lesser extent, and it is possible that limited infrequent use, such as that of solitary males, could go undetected. In the absence of any detections, however, it is unlikely that maternity colonies which typically range from 35 to 150 individuals, are present. The absence of detections indicates Cave Rock does not provide significant roosting habitat for the Townsend's big-eared bat. It is also unlikely that any significant

winter hibernation occurs on Cave Rock due to the below-freezing temperatures experienced at the lake. Potential suitable habitat for hibernation would be limited to cracks and fissures with sufficient depth to maintain a relatively stable microclimate.

Fringed Myotis (*Myotis thysanodes*)

Distributional range is across much of western North America from southern British Columbia, Canada, south to Chiapas, Mexico, and from Santa Cruz Island in California east to the Black Hills of South Dakota. Altitudinal range is from sea level to 2,850 meters. This species has been found in hot desert scrubland, grassland, xeric woodland, sage-grass steppe, mesic old-growth forest, and multi-aged subalpine coniferous and mixed-deciduous forests. Xeric woodlands (oak and pinyon-juniper) appear to be the most commonly used.

M. thysondes is a colonial-roosting species with colonies ranging from 10 to 2,000 individuals. Caves, buildings, underground mines, rock crevices in cliff faces and bridges are used for maternity and night roosts, while hibernation has only been documented in buildings and underground mines. Tree-roosting has been documented in large conifer snags in Oregon, ponderosa snags in New Mexico, and in hollow redwood and giant sequoia trees in California. Maternity roosts have been found in sites that are generally cooler and wetter than is typical for most of the other members of the Vespertilionidae family, which includes all species considered in this analysis. Females give birth to a single young from May to July, and young are capable of flight in 16 days and fully volant in 20 days. Dietary information is limited, although in one study the dominant prey was beetles and in another moths. Other taxa found in the diet are *phalagids*, (harvestmen), g*yrllids* (crickets), *tipulids* (crane flies), *araneids* (spiders), and *hemipterans* (bugs). The presence of non-flying taxa in the diet suggests a foraging style that relies at least partially on gleaning. Relatively long commuting distances of 13 km each way and 930 meters elevational gain have been documented for post lactating females between roost sites and foraging areas. This animal is not thought to undergo extensive migrations, although migratory information is lacking.

Yuma Myotis (*Myotis yumanensis*)

Distributional range is across the western third of North America from British Columbia to Baja California and southern Mexico. In the United States, it occurs in all the Pacific coastal states, as far east as western Montana in the north, and as far east as western Oklahoma in the south.

M. yumanensis is usually associated with permanent water sources, typically rivers and streams. It occurs in a variety of habitats including riparian, arid scrublands and deserts, and forests. Bridges, buildings, cliff crevices, caves, mines, and trees are used for roosting. Individuals become active and forage just after dark, feeding primarily on emergent insects. The diet is known to include caddis flies, flies, midges, small moths, and small beetles. Females give birth to one young from mid-spring to mid-summer in maternity colonies that may range in size up to several thousand individuals. Males tend to roost singly in the summer.

Long-Legged Myotis (*myotis volans*)

Distributional range is across western North America from southeastern Alaska, British Columbia and Alberta in Canada to Baja California and central Mexico. It occurs throughout the western United States from the Pacific coast to the Great Plains and central Texas.

M. volans primarily inhabits coniferous forests but also occurs seasonally in riparian and desert habits. Abandoned buildings, cracks in the ground, cliff crevices, exfoliating tree bark, and hollows within snags are used as summer day roosts while caves and mine tunnels are used as hibernacula. It is active throughout the night although peak activity is 3–4 hours after sunset. This bat has a rapid, direct flight,

and travels considerable distances while foraging. Foraging occurs in and around forest canopy, primarily on moths and other soft bodies insects. Young are born from May through August.

Long-Eared Myotis (*Myotis evotis*)

Distributional range is across western North America from southwestern Canada (British Columbia, Alberta, Saskatchewan) to Baja California, and eastward in the United States to the Great Plains.

M. evotis occurs in semiarid shrublands , sage, chaparral, and agricultural areas, but is usually associated with coniferous forest. Individuals roost under exfoliating tree bark, and in hollow trees, caves, mines, cliff crevices, sinkholes, and rocky outcrops on the ground. They also sometimes roost in buildings and under bridges. During the summer females form small maternity colonies, whereas males and non-reproductive females roost alone or in small groups nearby. Females give birth to one young in late spring or early summer. Presumably, most individuals hibernate during the winter in small colonies. *M. evotis* is a slow flyer and is often described as a hovering gleaner that feeds by eating prey off foliage, tree trunks, rocks, and from the ground.

California Myotis (*Myotis californicus*)

Distributional range is across much of western North America from southeastern Alaska and southwestern British Columbia, through most the United States west of the Rocky mountains, and south to Baja California and much of mainland Mexico and into Guatemala. This species occurs in a wide variety of habitats. While typical of the deserts and interior basins in the western U. S., it also occurs in forested and montane regions.

During summer *M. californicus* roost alone or in small groups in caves, mines, rocky hillsides, under tree bark, and in buildings. Maternity colonies are formed in spring or early summer where they give birth to one pup per year. Recent studies in Canada have documented maternity colonies of up to 52 individuals roosting under sloughing bark, and in cracks and hollows of large diameter, intermediate stage snags (preferably ponderosa pine). In winter, solitary individuals and small groups have been found in caves, mines, and buildings. Individuals are known to be active during the winter, even at temperatures below freezing. They typically feed on moths and flies, but have been known to eat other insects.

Small-Footed Myotis (*Myotis ciliolabrum*)

Distributional range is across the western half of North America from British Columbia, Alberta, and Saskatchewan in Canada, throughout most of the United States west of the 100th meridian, and into central Mexico.

M. ciliolabrum occurs in deserts, chaparral, riparian zones, and western coniferous forest; it is most common above pinyon juniper forest. Individuals are known to roost singly or in small groups in cliff and rock crevices, buildings, concrete overpasses, caves, and mines. They forage early in the evening foraging on various small insects. A single pup per year is born in late spring or early summer.

Western Pipistrelle (*Pipistrellus hesperus*)

The western pipistrelle occurs from the desert lowlands of the southwestern United States into southern Washington. In Mexico, it ranges throughout Baja California and on the mainland to Michoacan and Hildago. While most commonly associated with arid, desert landscapes, it also occurs in association with significant rock features in lower elevation mixed conifer forest in mountain ranges of California and up to fir-spruce forests in Arizona.

Commonly known as canyon bat due to association with canyons and rock outcrops where they roost in small crevices (usually below 2,000 meters elevation), they may also occupy crevices in mines and caves. It is also postulated, due to the distance they have been found from rock outcrops, that they may even roost under rocks or in rodent burrows. Small swarming insects such as flying ants, mosquitoes, fruit flies, leafhoppers, and ants are its primary prey. Young are typically born from May through June and mothers with their young may roost alone or in groups of fewer than 20 individuals. Young are able to fly within a month.

Big Brown Bat (*Eptesicus fuscus*)

E. fuscus has an extremely broad distribution, extending from Alaska and northern Alberta to northern South America, and occurs in a wide variety of habitats from desert scrub and moist coastal forests to high elevation conifer forests. This bat occurs throughout the western U.S. where two subspecies, *E. f. bernardinus* and *E. f. pallidus* are recognized. The big brown bat is one of the few species that persists in relatively urbanized environments.

E. fuscus is a colonial species with maternity colony size varying from about a dozen to several hundred. This bat is well known for its propensity to roost in man-made structures, including buildings, mines, and bridges, but it has also been found in caves, crevices in cliff faces, and a hole in a giant saguaro. Extensive tree roosting, particularly in large-diameter snags, has been documented more recently. Males as well as pre-parturition and post-lactating females commonly use bridges as night roosts. In the west, this species is known to hibernate in relatively small numbers in caves, buildings and mines. While foraging, it generally pursues prey in tree canopies, over meadows, or along water courses within a few kilometers of its roost. *E. fuscus* feeds primarily on heavy-bodied insects, and although primarily a beetle (*coleopteran*) specialist, its diet also includes hemipterans, dipterans, lepidopterans, trichopterans, and hymenopterans. Mating occurs in the fall and winter, although ovulation does not occur until the spring. Each female produces a single young in early summer (the eastern subspecies produces twins) which become volant in 3 to 4 weeks. This species is not known to migrate large distances although some seasonal migration has been observed by males in the Cascades. Females and males roost separately in the spring and summer but roost together during hibernation. This species spends most of the winter hibernating but may be active on warm nights in the winter in the southwest.

Western Mastiff Bat (*Eumops perotis*)

Distribution is disjunct, with two subspecies confined to South America. The subspecies that occurs in North America, *E. p. californicus*, ranges from central Mexico across the southwestern United States (parts of California, southern Nevada, Arizona, southern New Mexico and western Texas). It has also been detected acoustically in southern Utah. Roosts have been documented recently in California up to 1,400 meters with foraging animals around 2,700 meters, which exceeds the previously known elevational range of the species. Distribution is likely geomorphically determined, with the species being present only where significant rock features offer suitable roosting habitat. This bat is found in a variety of habitats, from desert scrub to chaparral to oak woodland and into the Ponderosa pine belt.

E. perotis is primarily a cliff-dwelling species, where maternity colonies of 30 to several hundred (typically fewer than hundred) roost generally under exfoliating rock slabs (e.g., granite, sandstone, or columnar basalt). It has also been found in crevices of large boulders and buildings. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently found in broad open areas. Foraging habitats include dry desert washes, floodplains, chaparral, oak woodland, open ponderosa pine forest, grassland , montane meadows, and agricultural areas. The diet consists primarily of moths (*Lepidoptera*), but also includes crickets and katydids. Young are born early to mid-summer and, although most are born by early July, parturition

dates vary extensively even within colonies. This species appears to move relatively short distances seasonally. It does not undergo prolonged hibernation and appears to be periodically active all winter, and thus may seek winter refugia that are protected from prolonged freezing temperatures.

The largest of the North American bats, *E. perotis* has an audible echolocation call that allows it to be readily detected in foraging areas.

Mexican Free-Tailed Bat (*Tadaria brasiliensis mexicana*)

One of nine recognized subspecies this bat counts among of the most widely distributed mammalian species in the western hemisphere. Two of the nine subspecies occur in the United States. *T.b.cynocephala* is the southeastern occurring subspecies, while *T.b. mexicana* occurs in the western United States, from southern Oregon to eastern Nebraska and south through Mexico. *T. brasiliensis* is most commonly associated with dry, lower elevation habitats, yet it also occurs in a variety of other habitats, and is found up to at least 3,000 meters in some of the western mountain ranges.

This species is highly colonial with maternity colonies ranging in size from a few hundred to 20 million. The most commonly used natural roosts are caves and rock crevices on cliff faces. Roosting also occurs in abandoned mines and tunnels, highway bridges and large culverts, buildings and bat houses. Maternity roosts are usually warmer and larger than bachelor and non-reproductive female roosts. *T. b. mexicana* is primarily migratory with large numbers of females returning to large, warm caves Texas, New Mexico, Arizona, and Oklahoma each spring. Birth usually occurs between mid-June and mid-July. The ecology, distribution, and seasonal patterns of *T. b. mexicana* are not well understood in some parts of its range, particularly California, Nevada, southern Oregon, and Utah.

3.8(b) Environmental Consequences, Including Direct, Indirect, and Cumulative Effects

Evaluation Criteria, Wildlife

The LTBMU Forest Plan directs the Forest Service to perpetuate viable populations of wildlife species native to the area through management of their habitat, including human-access control when necessary, with duration of closures being as short as feasible where recreation opportunities are in demand (Practice 12, Nonstructural Wildlife Habitat Management, pages IV-26).

Significant Effects Summary, Wildlife

There are no significant wildlife effects for any of the alternatives. Based upon the lack of known occurrences, poor habitat suitability, and other existing disturbances, none of the alternatives would affect, negatively or positively, the peregrine falcon or the bald eagle. Based upon the absence of known use and low habitat suitability of Cave Rock, as well as the absence of acoustic detections for the spotted bat or western mastiff bat, this analysis further determined that none of the alternatives would affect osprey or the two bat species.

Based upon known presence or acoustic detections that either confirmed presence (long-eared myotis, fringed myotis, western pipistrelle) or the potential for occurrence (Mexican free-tailed bat, big brown

bat, California myotis, small-footed myotis, Yuma myotis, or long-legged myotis), this analysis also determined that activities on Cave Rock may cause some disturbance, but would have no significant effect on, the common raven, rock dove, long-eared myotis, fringed myotis, western pipistrelle, Mexican free-tailed bat, big brown bat, California myotis, small-footed myotis, Yuma myotis, or long-legged myotis.

Regarding undetected or potential future occurrences of Townsend's big eared bat, this analysis determined that, based upon the known distributional range and the presence of potentially suitable habitat, Alternatives 1, 2, and 3 may affect individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species. Based upon presence as determined by acoustic detection surveys, these alternatives may have the same effect for the pallid bat.

A detailed analysis of environmental consequences, by activity, follows:

Climbing Effects on Wildlife

Based upon the lack of known occurrences, poor habitat suitability, and other existing disturbances (such as highway traffic), recreational rock climbing on Cave Rock would have no effect, directly or indirectly, upon either the peregrine falcon, the bald eagle, or osprey.

There is the potential for direct effects from rock climbing on Cave Rock's ravens and rock doves during their reproductive period. Two active raven nests are present on the exposed face of Cave Rock. One nest is located above the southbound tunnel and the other is located between the two tunnels. Both nests are outside the area of concentrated rock climbing activities, although there are some less popular climbing routes near each of the two nests. These routes would be removed under Alternatives 2 through 6. Alternative 1 would allow the continued use of these routes. Both nests are afforded protection from above by overhanging rock that would protect them from materials that could be dislodged by rock climbers. In 1998, both nest sites fledged young, which indicates ravens are tolerant of the level of rock climbing activities that have been ongoing.

Similar to the raven, rock doves have been successfully reproducing at Cave Rock in spite of ongoing human activities. Rock doves successfully fledged young in 1998 on the narrow ledges at the mouth of the cave, which is at the base of the primary climbing routes. Fledged young were observed around the mouth of the cave, as well as at the very back of the cave, and it was evident from the amount of whitewash and feathers present that the level of use by rock dove is fairly high.

Potential direct effects on bats at Cave Rock are primarily those of disturbance to day roosts, maternal roosts, or hibernaculums as a result of rock climbing activities. Continued disturbance may displace some individuals from suitable habitats, but the potential for physical loss of habitat through modifications caused by rock climbing activities is limited. Some potential for habitat loss does exist, however, in that chalk residue could serve as an irritant and deter use by bats. It is uncertain if either human scent or the scent of chalk would deter use. Bat foraging occurs from sunset to sunrise and would not be affected by climbing, which is a daytime activity. Alternatives 2, 4, 5, and 6 would prohibit nighttime climbing; however, even without regulations, nighttime climbing has not been occurring at Cave Rock. Even so, any overlap of climbing activities with the foraging period would have little effect on foraging activities.

The portion of Cave Rock most heavily used by rock climbers encompasses a relatively small portion of the total area supporting potentially suitable bat habitat. Rock climbing activities predominantly occur on

the west and southwest faces of Cave Rock, with the greatest activity focused on routes extending up the steep, overhanging face above the cave. Within the area of concentrated climbing activity, some suitable, relatively undisturbed habitat exists between routes. Although it supports an abundance of cracks and crevices, habitat characteristics on the north side of Cave Rock differ in that this side has more vegetative cover due to its aspect and slope, which is less extreme without the sheer rock faces. Human disturbance there is virtually nonexistent; even under Alternative 1 it is unlikely to attract rock climbing activity, thus preserving its habitat values. However, the north face of Cave Rock does not capture the radiant heat of the sun as the south and southwest aspects, which may lessen its desirability as roosting habitat.

Suitable habitat is not limited to the shallow cave or network of cracks and crevices extending above where the majority of rock climbing activity occurs. The extensive network of cracks and crevices found throughout Cave Rock, along with the rock outcrops upslope, provide an abundance of potentially suitable habitat. A reduction in the current level of rock climbing activity or a restriction of the distribution of routes (Alternatives 2 through 6) could increase the amount of available habitat and reduce the potential for disturbance or displacement. This is a slightly beneficial effect.

Deep internal cracks, crevices, or fissures that open into larger internal cavities with a fairly constant microclimate have the greatest potential for use as maternity roosts and hibernaculums. These sites provide a more consistent microclimate than surface roosts; in addition, they minimize energy expenditures and afford greater protection from predation and disturbance. The preferred microclimate conditions vary among species and may vary between maternal roosts and hibernaculums within species. Climbers generally do not penetrate deeply enough into crevices to directly affect this type of bat use.

Although day roosts sites are more variable than either maternal roosts or hibernaculums, they are still selected to provide protection from predation, direct sunlight, wind, rain, and significant temperature fluctuations. The effects of displacing individuals from day roosts would not be as significant as displacement from maternal roosts or hibernaculums, which has the potential to affect a greater number of individuals. The greater availability of suitable day roosts would help minimize time spent searching for another suitable site, thus reducing energy expenditures and the risk of predation, even though most diurnal avian predators are not very adept at capturing flying bats. Temperature variation would be much less of a factor than during the hibernation period and prey would be more readily available to replenish energy reserves. Alternatives 3, 4, 5, and 6 would maximize this benefit.

The Forest Service listed as sensitive Townsend's big-eared bat was not detected at Cave Rock and there are no known occurrences for the surrounding area. Although Cave Rock is within the elevational range of the species and suitable habitat features do exist, its strongest habitat associations are with caves and mines, which are lacking in the Lake Tahoe area. The high sensitivity of this species to disturbance may preclude it from utilizing the shallow cave at Cave Rock, even in the absence of human presence, due to the high traffic volume of Highway 50 below its mouth and the heavy utilization it receives from rock doves. Cave Rock's extensive network of cracks and crevices provides suitable habitat features that Townsend's big-eared bats are known to utilize to a lesser extent, and it is possible that limited infrequent use, such as that of solitary males, could go undetected. In the absence of any detections, however, it is unlikely that maternity colonies, which typically range from 35 to 150 individuals, are present. Even if undetected, infrequent use by a limited number of individuals occurs, the potential to be affected by human activities is low, based upon the amount of suitable habitat present relative to the limited area of disturbance. It is also unlikely that any significant winter hibernation occurs on Cave Rock, because of the below-freezing temperatures experienced at the lake. Potential suitable habitat for hibernation would be limited to cracks and fissures with sufficient depth to maintain a relatively stable microclimate, which would also serve to limit any potential disturbance from climbing on the face of the rock.

The Forest Service listed as sensitive pallid bat was detected during survey efforts, although the number of individuals could not be determined. Even though acoustic surveys did not indicate the presence of large numbers of pallid bats, this does not necessarily preclude the possibility of a maternity site being present, since pallid bats often occur in low numbers. If present, these sites may be outside those areas where rock climbing activities occur, or could be in deep cracks or fissures with depths not penetrated by rock climbing activities. This species uses a wide variety of habitats, and the continued use of Cave Rock as a popular year-round rock climbing site may serve to limit the potential for the establishment of maternity sites around the more popular climbing routes, as most animal species select sites of minimal disturbance for maternal activities. In addition, maternal sites are typically selected based upon their ability to provide a stable microclimate and protection from predation, which would also limit the potential for disturbance from rock climbing activities.

Nonclimbing Recreation Effects on Wildlife

Based upon the lack of known occurrences, poor habitat suitability, and other existing disturbances (such s highway traffic), low-impact uses, such as hiking, fishing, scenic viewing, picnicking, or stargazing on Cave Rock would have no effect, directly or indirectly, upon either the peregrine falcon, the bald eagle, or osprey.

There is a slight potential for direct effects from hiking activities on both ravens and rock doves during the reproductive period. Two active raven nests are present on the exposed face of Cave Rock. One nest is located about the southbound tunnel and the other is located between the two tunnels. Both nests are afforded protection from above by overhanging rock that would protect them from materials that could be dislodged by hiking activities. In 1998, both nest sites fledged young, which indicates ravens are tolerant of the level of hiking activities that have been ongoing.

Similar to the raven, rock doves have been successfully reproducing at Cave Rock in spite of ongoing human activities. Rock doves successfully fledged young in 1998 on the narrow ledges at the mouth of the cave. Fledged young were observed around the mouth of the cave as well as at the very back of the cave and it was evident from the amount of whitewash and feathers present that the level of use by rock dove is fairly high.

Potential effects on bats at Cave Rock are primarily those of disturbance to day roosts, maternal roosts, or hibernaculums. Human presence on top of Cave Rock would have little if any effect on bats because it provides very limited access to suitable roosts sites, which are primarily on the steep faces. Foraging occurs from sunset to sunrise and would not be affected by either of these uses, because they are predominantly daytime activities and human presence is nominal at night. Any overlap of these uses with the foraging period would have little effect on foraging activities. Hikers rarely venture to areas that would be considered bat habitat.

Effects of Native American Spiritual Uses on Wildlife

While the specific activities that are conducted by spiritual practitioners are unknown, their visitation to Cave Rock is relatively rare. Effects expected would be similar to other low-impact uses of Cave Rock, described previously.

Effects of Other Spiritual Uses of Cave Rock on Wildlife

While the specific activities that are conducted by spiritual visitors are unknown, their visitation to Cave Rock is relatively rare. Effects expected would be similar to other low-impact uses of Cave Rock, described previously.

Effects of Graffiti on Wildlife

The act of graffiti removal can occur in many forms that variously affect wildlife. Sometimes a washing or use of chemicals can remove the graffiti. Before doing so, the proposed cleaning solution should be discussed with the forest wildlife biologist to ensure it can be applied without harmful effects on wildlife.

Effects of Commercial Activities on Wildlife

Wildlife effects from commercial activities would vary depending upon the activity proposed. Currently, there are no special-use permits in effect for the area.

Effects of Educational Activities on Wildlife

The Forest Service has been informed that two community college classes conduct field trips to the top of Cave Rock. Their effects are the same as those described previously for low-impact uses.

Effects of Masonry Flooring and Rock Seating within the Cave on Wildlife

The existing situation does not adversely affect wildlife. Indirectly, it provides a comfortable setting that may invite human presence in the cave for longer periods than might otherwise have occurred. This is a minor and speculative effect.

To remove the masonry floor would require the use of wheelbarrows, sledgehammers, hammers, prybars, and other tools, and would be a short-term but intense activity level in the cave. To move the multi-ton boulders again would require a similar come-along rigging system as was employed when they were originally moved. This could disturb wildlife for a short period, but the effect would be minor.

Effects of Study/Research on Wildlife

To complete this FEIS and to further scientific knowledge, the Forest Service commissioned several studies in the Cave Rock vicinity. Biological surveys have occurred, a rat midden study is underway, a geological assessment was made, a total inventory of fixed anchors on Cave Rock has occurred, and the TRPA contractors conducted a complete archaeological physical survey of the area. None of these assessments physically affected Cave Rock's wildlife, either directly or indirectly.

Effects of Monitoring and Law Enforcement on Wildlife

To determine compliance with the Forest Order, the Forest Service's law enforcement branch routinely patrols Cave Rock. Sometimes officers view the rock from the boat ramp with binoculars; other times they hike into the cave. In addition, the agency plans annual assessments of the status of fixed anchors, using the 1998 map as a baseline. None of these activities physically affect Cave Rock's wildlife, either directly or indirectly.

Effects of Rescue on Wildlife

In the past, rescue assistance has been required at Cave Rock from the Tahoe-Douglas Fire Protection District. These activities are necessary for public health and safety and are specifically exempted from Forest Orders that apply at the site. Adverse wildlife effects are possible, but remote and unanticipated. For example, when a parasailer crashed into Cave Rock in the early 1990s, there may have been disturbance in areas that have never seen human presence before. But any disturbance would be short-lived and future needs cannot be anticipated.

Reasonably Foreseeable Future Actions

As disclosed in section 2.6 of this FEIS, the Forest Service intends to develop a Cave Rock education program, voluntary user registration, and monitoring. None of these activities could directly affect Cave Rock's wildlife. Indirectly, the education program would likely decrease use in the area, which could reduce the effects described in previous sections.

Cumulative Effects

To accurately assess cumulative effects on wildlife, the other primary land use activities going on in the vicinity and not within Forest Service authority to regulate, must be considered. These activities include: highway use, including road biking, highway and tunnel maintenance, boating and boat launching, parking, utility lines/easements and their maintenance, and urbanization. As explained previously, the noise and activity that serve as the baseline for Cave Rock already affect the wildlife inhabiting the area. None of the alternatives assessed in this FEIS modify this baseline enough to make for a significant positive or adverse effect.

3.9 Relationship Between Short-Term Uses of Man's Environment, and Maintenance and Enhancement of Long-Term Productivity

Management of public forests is a long-term venture, but it still must serve the year-to-year needs of society. The Multiple-Use Sustained-Yield Act defines sustained yield as the "achievement and maintenance in perpetuity of high annual or periodic outputs of the various renewable resources without

impairment of the productivity of the land." Productivity must be maintained over the very long term. Short-term uses are often the means to the ends.

Cave Rock is significant to the Washoe Tribe because of the power it embodies (LSA 1998: 152). That power remains (LSA 1998: 152), regardless of physical effects and recreational use. However, the sustained intimate contact between rock climbers and Cave Rock is believed to enable the power of the rock to be changed or altered, which affects the materials of the TCP. (See section 3.3(b) of this document, "Heritage Resources") It is unclear whether the rock is believed to be able to regain this power over time because of the vague accounts regarding the taboo subject to Cave Rock and the fact that the Washoe consultants are charged to reveal as little as possible about its sources of power (LSA 1998: 70). It is possible that the power can be restored, as indicated in the following conclusion: "[T]he Washoe believe that if traditions surrounding Cave Rock are restored and adhered to, a positive influence on all life will be affected, especially towards maintaining the integrity and well-being of the Lake Tahoe Basin environment and all humans who inhabit it" (LSA 1998: 101). If this is the case, then the power of the rock could be considered "renewable." Thus, the short-term uses at Cave Rock, especially in light of the significance of Cave Rock since prehistoric times, will not compromise the area's long-term productivity.

Cave Rock is significant to climbers because of its uniqueness and difficulty, and its concentration of highly technical climbing routes. Other users sharing the area do not affect the area as a climbing resource. Alternatives 3, 4, 5, and 6 would essentially prohibit climbing at Cave Rock, at least in the short-term. The removal of bolted routes represents the elimination of much time and energy by expert climbers. However, if the decision were made in the future to reintroduce climbing, nothing would have been done to the area physically that would compromise its long-term productivity for climbing recreation. The same is true for other forms of recreation that would be eliminated if the area were closed to public use under Alternative 4.

3.10 Irreversible and Irretrievable Commitments of Resources

An "irreversible commitment of resources" means that future options are lost as a result of a decision to use or modify resources that are renewable only over a long period of time. Nonrenewable resources (e.g., soils) are irreversibly committed once used or lost. An irreversible commitment of resources refers to a loss of production, harvest, or use of a renewable resource because of land allocation or scheduling decisions.

At Cave Rock, the reversibility of effects such as climbing and other recreational uses is important. "While the Washoe are deeply saddened by such irreversible impacts [to Cave Rock] as the highway, its tunnels and the boat ramp and activities it attracts, they choose to focus on correcting the reversible damage of ongoing impacts, such as rock climbing, where there are prospects that change can occur (LSA 1998: 150). Thus, none of the proposed changes in management direction for the Cave Rock area (i.e., elimination of climbing) would result in irreversible commitments of resources.

Selection of Alternative 1 or 2 may however result in irreversible effects to the Washoe Tribe culture. If current adverse impacts to the Cave Rock TCP continue, it is possible the Washoe Tribe would abandon its cultural practices at Cave Rock. The effect of this over several generations could be a permanent and irreversible loss of this part of their cultural heritage.

An “irretrievable commitment of resources” is the lost production or use of renewable resources caused by allocation decisions. Opportunities are foregone for the period of time that the resource cannot be used. For example, the potential for soil to grow timber is irretrievably lost while the area is serving as a road. However, the condition can be reversed by obliterating the road to reduce soil compaction, and by planting trees.

Since Cave Rock is considered to be a significant cultural and historical resource eligible for the National Register the condition of the property should be maintained consistent with the historic period. With regard to the TCP, it is essential that relevant relationships between the Washoe Tribe and the resource survive (LSA 1998: 160). Cave Rock continues to dominate the Tahoe shoreline and continues to evoke a sense of spiritual power (LSA 1998: 150). Maintaining and increasing recreational activities inconsistent with the historic period endanger these qualities (LSA 1998: 150). Loss of these qualities or loss of the relevant relationships would be considered an irretrievable loss to the Washoe Tribe.

In addition, loss of the resource to recreational rock climbing would be considered irretrievable to those climbers in their peak climbing years who would not be able to climb at Cave Rock under the proposed management prescription.

Chapter 4
Public Participation, Consultation and Coordination with Other Governments, Issues Considered, and Responses to Public Comment

Coordination and Consultation Efforts

The Forest Service is currently consulting on a government-to-government basis with the Washoe Tribe of Nevada and California and has been meeting with interested stakeholders, including many individual local residents, members of the tribe and rock climbers. Formal scoping for the Cave Rock Management DEIS began on January 13, 1999, with the public release of the proposed action.

Before entering this formal planning phase, an extensive public involvement ("collaboration") effort occurred between January and May 1998. This effort encouraged and facilitated public involvement for an issue that affects the quality of the human environment, as required under 40 CFR 1500.2(d). The five meetings held were well attended by climbers from throughout the Reno-Tahoe-Truckee region, interested area residents, and a notable number of Washoe Tribe members. The Washoe Tribe participants represented all of the colonies and some of the highest-ranking traditional elders, including some who are Cave Rock practitioners. Washoe Tribal Chairman Brian Wallace agreed to the tribe's participation in the process at the December 1997 meeting of the tribe's cultural committee. At that time, he designated the tribe's cultural resources coordinator as the contact person on this issue.

The key distinction between the collaboration and scoping phases is that throughout the collaboration effort the Forest Service was "position neutral." It was a learning period, and the Forest Service did not express a favored long-term course of action. That situation changed with the announcement of the Forest Service's proposed action. The proposed action was described in the January 13, 1999, scoping letter as a starting point in the formal planning process that indicated where the forest supervisor stood at that time, with the information available. The scoping letter requested information from the public that could benefit the decision-making process to be sent to the Forest Service by March 1, 1999, the end of the scoping period.

To meet the requirements of 40 CFR 1501.7(a)(1), 1503.1(a)(3)(4) and 1506.6(a-d), the scoping letter was mailed to over 150 agencies and individuals, including all those who signed in at the 1998 collaboration sessions. A Notice of Intent (NOI) to prepare an EIS, which identified the proposed action, scoping period, and Forest Service contact person, was published in the Federal Register on Monday, January 25, 1999. A news release was faxed out on the afternoon of January 13, 1999, to 29 media outlets (print, radio, and television).

In addition, the forest supervisor, planning staff officer/tribal relations coordinator, public affairs officer, archaeologist, and community planner met with interested members of the Washoe Tribe. These tribal members included the tribal chairman, vice chair, cultural resources coordinator, members of the Tribal Council, and approximately 25 other tribal members, ranging in age from eight to 80, who were invited to attend. The tribe's Cultural Center office coordinated the tribal participation element of the gathering and included approximately 10 children who attend the special Washoe school where the native language is taught. That meeting, in Dresslerville, Nevada, was an opportunity for the forest supervisor, personally, to share his proposed action with the tribe, before the public release of the action to the media. The forest supervisor described the planning process, the proposed action, and the type of input requested, and openly invited tribal members to meet with Forest Service staff. The question-and-answer format enabled full group participation. There were no subsequent requests for meetings.

A public scoping workshop was held on February 25, 1999. Its date, time, format, and location were announced in several locations including:

- the scoping letter,
- the tribal meeting,
- the Forest Service web site,
- the Federal Register notice,
- *Tahoe Daily Tribune* news article published on January 14, 1999,
- *Reno Gazette Journal* news article published on January 14, 1999,
- a paid legal notice published in the *Tahoe Daily Tribune* on January 19, 1999, and
- *Tahoe Daily Tribune* news articles dated February 22, 24, and 25.

In addition, notices were placed on Internet climbing sites and newsgroups with links to the Forest Service web site, on which the scoping letter was posted. (The attorney for the Washoe Tribe was contacted for suggested tribal web sites on which to post a link to the Forest Service site and additional information, but was unable to provide a contact.) The workshop was intended to be an opportunity for the public and agencies to drop in at anytime during the designated hours and provide the individual forest representatives with feedback on the proposed action. It was not intended to be a formal presentation or group discussion, but was designed as an information gathering exercise that provided an alternative for those who were not comfortable with providing their input in a letter format or making a statement in front of a group. Approximately 20 people attended.

The lead climbing community contact was offered a climbers meeting with the forest supervisor in a forum similar to the special meeting with the tribe. However, that community was generally accepting of the draft proposed action and had nothing to add. Consequently, the offer was declined at that time.

A Scoping Summary document was prepared and mailed to all planning participants in April 1999. It documents the concerns raised during both scoping and collaboration phases of the Cave Rock analysis process. An appendix documenting the 1998 collaboration effort is included as part of this document (appendix A).

Following completion and release of the DEIS, the Forest Service received additional comments. Meanwhile, leadership changed at the Forest Service LTBMU. The new forest supervisor reviewed the

information regarding preparation of the DEIS, public scoping, and collaboration effort, and subsequently selected a different proposed action. This new proposed action is a new alternative developed by combining elements of Alternatives 3 and 5. It does not create any new actions that have not already been analyzed in the DEIS; therefore the FEIS reflects changes made to the DEIS to accommodate this new alternative. The new preferred alternative is described and analyzed in chapters 2 and 3 of this document.

Issues Considered

The scoping process sorted the concerns raised by the public and others, as documented in the April 1999 Cave Rock Scoping Summary document that was mailed to all participants in the Cave Rock planning effort. Issues to be addressed during the environmental analysis process documented in this FEIS drive the range of alternatives, and must meet the proposal's identified purpose and need. Issues from the Scoping Summary are paraphrased below.

Issue 1 – Cultural and Historic Resources

The values that make Cave Rock eligible as a TCP, Historic Transportation District, and an archaeological site need to be protected from activities that adversely affect the integrity of these attributes.

Alternative 5 of this FEIS addresses this issue.

Issue 2 – Privacy

Exclusive use of Cave Rock by Washoe spiritual leaders is not possible while any public use is allowed there. Some members of the Washoe Tribe feel that their values are not considered above other uses, and they are not able to exercise their sacred duty to protect the integrity of the site.

Alternative 4 of this FEIS addresses this issue.

Issue 3 – Cave Rock as Sacred Site

Cave Rock is a Washoe Tribe sacred site that some members of the tribe believe is defaced and devalued by climbing and other activities that physically alter the rock formation. The Washoe Tribe feels excluded from the Tahoe Basin and their heritage related to the area by activities such as climbing at Cave Rock.

Alternative 3 of this FEIS addresses this issue.

Issue 4 – Land Ownership

Cave Rock should be returned to the Washoe Tribe to enable their reconnection to the lands that they lost.

See section 2.3, "Alternatives Considered but Eliminated from Detailed Study," of this FEIS.

Issue 5 – Climbing Access

Climbers have the right to climb on public lands and they should be able to climb at Cave Rock without restriction.

Alternative 1 of this FEIS addresses this issue.

Response to Public Comment on the Draft EIS

Comments to the Cave Rock DEIS were received during a comment period that ended October 13, 1999. Twenty-two comment letters or statements were received. Three letters were received from federal agencies, three were from state agencies, one was from the Washoe Tribe, two were from organizations, and 13 were from individuals.

This chapter includes comments received on the Draft EIS and how they were responded to in developing the Final EIS.

List of Respondents and Index Numbers

1. Michael and Jan Gilbert
2. Bob Harris
3. Terry Lilienfield
4. Matt Lorne
5. Aidan Maguire and Laurie Dahl
6. Michael Makley
7. Eric Perlman
8. Steven Piper
9. John Robinson
10. Penny Rucks
11. Graham Sanders
12. Mark and Tracy Weber

13. Access Fund – Paul Minault, Regional Coordinator for Northern California
14. Advisory Council on Historic Preservation – Don Klima, Director Office of Planning and Review
15. Donner Ski Ranch – John Hoffman
16. Progressive Leadership Alliance of Nevada (PLAN) – Bob Fulkerson, State Director
17. State Historic Preservation Office, State of Nevada, Dept. of Museums, Library and Arts – Alice M. Baldrica, Deputy State Historic Preservation Officer
18. U.S. Department of the Interior, BLM – Cynthia A. Ellis, Native American Program Coordinator, Natural Resources, Lands and Planning
19. U.S. Environmental Protection Agency, Region IX – David J. Farrel, Chief, Federal Activities Office
20. Washoe Tribe of Nevada and California – A. Brian Wallace, Chairman
21. Chris Belizzi

The comments are listed by the respondent number, defined in the list above, and followed by the Forest Service response. The complete letters are included in appendix B. The following is a summary of the substantive comments received by the Forest Service. The process employed in this analysis was not a vote count.

Respondent #1 – Michael and Jan Gilbert

1. **Comment:** The Washoe holy site needs to be protected.

   RESPONSE: The American Indian Religious Freedom Act (P.L. 95-341) establishes as the policy of the U.S. Government the protection of Indian Tribes' inherent right to the free exercise of traditional religions including access to spiritual places. Executive Order 13007 requires agencies to accommodate access to sacred sites on Federal land by Indian tribes, and to try to avoid damaging the physical integrity of such sites. Each of these acts requires consultation with tribes to attempt to minimize the effects of Federal undertakings.

   Cave Rock is eligible for listing on the National Register of Historic Places as a Traditional Cultural Property (TCP), the designation of historic spiritual sites. The Forest Service has developed a new proposed action (Alternative 6) in the FEIS. The primary theme of this new alternative is "maximum immediate protection of Heritage Resources." This new alternative combines elements of Alternatives 3 and 5 with a new implementation time to be "effective immediately" (i.e., without the 3-year phase in period found in Alternative 5.) Although the activity of climbing will be restricted, the general public will continue to have access to Cave Rock. Activities permitted at Cave Rock are limited to those consistent with the historic period, defined as time immemorial to 1965, the time of Henry Rupert's death. Henry Rupert was a Washoe spiritual practitioner whose association with Cave Rock contributed to its National Register eligibility.

2. **Comment:** The preferred alternative in the DEIS would allow climbers to destroy this site despite efforts to preserve and protect Cave Rock and Lake Tahoe.

   RESPONSE: The Forest Service acknowledges your comment; please refer to response 1.

3. **Comment:** The preferred alternative in the Draft EIS makes a statement that Native spiritual practices are unimportant in relationship to an insignificant recreational group that has many alternative places to go.

   RESPONSE: It was never the Forest Services intent to make such a statement. Please note that based on public comments, and coordination with the Nevada State Historic Preservation Officer (SHPO) the Forest Service has developed a new preferred alternative (Alternative 6) in the Final EIS. Please refer to response 1. Though the decision to develop and select the new alternative was made by Forest Supervisor Gustafson, it was not the intent of her predecessor Juan Palma to suggest that Native spiritual practices are unimportant.

Respondent #2 – Bob Harris

4. **Comment:** How can an alternative be selected that has significant environmental effects upon heritage resources?

   RESPONSE: The National Historic Preservation Act directs Federal Agencies to take into account the effects of agency undertakings on significant historic properties. The act does not require protection of these properties. The National Environmental Policy Act also directs Federal Agencies to take into account the effects of agency undertakings on a broad range of environmental and social issues. In the case of the Cave Rock Management Plan all alternatives have significant environmental effects to either heritage resources or recreation. It is the responsibility of the Forest Service to weigh the pros and cons, including potential impacts, when making decisions. The new preferred alternative (Alternative 6) reduces the identified adverse effects to historic properties at Cave Rock significantly.

5. **Comment**: Laws protecting heritage resources are not being fully complied with.

   RESPONSE: The Forest Service has considered and complied with all applicable laws and policy (See FEIS chapter 1 pages 11–13). The primary law addressing Heritage Resources is the National Historic Preservation Act. Section 106 of this act provides guidelines for compliance with this law. Consultation with the Nevada SHPO, the Advisory Counsel on Historic Preservation, the Washoe Tribe, the Access Fund and a variety of other interested parties has been extensive and ongoing. Completion of the Section 106 process insures that this law has been complied with.

6. **Comment:** Forest Plan (p. IV-18) is not being followed in the priority listing for resolving conflicts.

   RESPONSE: The Forest Service has developed a new preferred alternative (Alternative 6) that restricts climbing at Cave Rock, effective immediately. According to the Forest Plan page IV-18 the preservation of cultural resources determined or believed to be of significance take priority over recreation facilities and uses (see chapter 3, page 4 of the Cave Rock FEIS).

7. **Comment:** Off-highway vehicles and mountain bikes are limited to areas due to resource or social conflicts and this should be no different.

   RESPONSE: The new proposed action (Final EIS Alternative 6) reflects current Forest Service understanding of the issues. This new alternative will limit activities occurring at Cave Rock. Please refer to responses for comments 1 and 6.

8. **Comment**: Similar recreation experiences should be provided in areas that do not have resource conflicts.

   RESPONSE: The Forest Service attempts to provide multiple-use opportunities on public lands that are safe, appropriate, and do not harm the environment or resources. Unfortunately, uses often occur in areas where there are resource conflicts and these conflicts have to be resolved by either limiting uses or accepting damage to resources. The Forest supervisor seeks to find an appropriate balance between allowing appropriate uses and resource protection.

Respondent #3 – Terry Lilienfield

9. **Comment:** The preferred alternative in the Draft EIS is a balanced option that allows everyone to enjoy this area.

   RESPONSE: The new preferred alternative (Final EIS Alternative 6) emphasizes cultural and historic resources. Although this alternative restricts rock climbing, the Forest Service believes it is also a balanced alternative that allows a wide variety of users to continue to enjoy the area. Most activities that currently occur at Cave Rock (e.g., fishing, hiking, sightseeing, etc.) will continue to be allowed, as they are consistent with historic uses of the area.

Respondent #4 – Matt Lorne

10. **Comment:** The safety (of motorists) is being jeopardized by people approaching or leaving the site.

    RESPONSE: The Forest Service acknowledges the concern. Although use of the cave will be greatly reduced under the new proposed action (Alternative 6), the general public and Washoe practitioners will still be allowed access via the Highway 50 median. The Forest Service has no plans at this time to improve access to Cave Rock.

11. **Comment:** Irreparable damage has already occurred so it is vital to protect what is remaining. If enough damage occurs, the site will no longer be eligible for protection.

    RESPONSE: The Forest Service acknowledges your comment; please refer to response 1.

12. **Comment:** Safety is an issue with the close proximity to Highway 50.

RESPONSE: The new preferred alternative (Alternative 6) eliminating climbing is responsive to this concern (see response to comment 10). Please refer to Chapter 3 pages 8 and 9 of the Final EIS for more information on the safety of non-climbing users of the National Forest.

13. **Comment:** Insurance should be provided in the event that climbing results in an accident to a motorist.

    RESPONSE: The federal Government is self-insured for activities occurring on public land. Since climbing is eliminated under the new preferred alternative (Alternative 6) this concern is no longer an issue as it relates to rocks being dislodged by climbers above the highway tunnels. Access to the main cave by non-climbers (e.g., hikers, Washoe doctors, sightseers, etc.) will continue to be a safety concern.

14. **Comment:** To demonstrate there are not safety concerns, the Nevada Dept. of Transportation (NDOT) and the Federal Highway Administration (FHWA) should submit letters of support for allowing climbing routes above or adjacent to Highway 50 in the FEIS.

    RESPONSE: Neither NDOT nor FHWA have expressed concerns about highway safety being jeopardized by climbing activities. Under the new preferred alternative (alternative 6) safety from climbing activities above or adjacent to Highway 50 will no longer be an issue.

15. **Comment:** Erosion could be a problem due to people creating trails to access the site.

    RESPONSE: According to the Forest Service evaluation of geologic resources at Cave Rock, "low impact" uses such as hiking, fishing, scenic viewing, picnicking, stargazing, etc. present little or no direct effects to the physical integrity of Cave Rock. Hikers tend to use existing trails or the historic road to access the site and only slight erosion is evidenced, as would be expected on un-vegetated, rocky areas. Please see chapter 3, page 10 of the FEIS.

Respondent #5 – Aidan Maguire and Laurie Dahl

16. **Comment:** The removal of masonry flooring proposed for Alternatives 2 and 3 look reversed.

    RESPONSE: The masonry flooring proposals for Alternatives 2 and 3 are correct. Alternative 2 would remove the masonry flooring as part of the mitigation of continuing climbing. Alternative 3 was intended to provide the option of leaving the masonry flooring if it was found that removing the flooring would cause more of an effect than leaving it in place.

Respondent #6 – Michael Makley

17. **Comment:** Since Cave Rock is eligible as a TCP due to the Washoe heritage; an alternative of how to manage the site should be compliant with Washoe beliefs.

    RESPONSE: The Forest Service acknowledges your comment. We believe that Alternative 4 precisely describes the Washoe preference for managing the site. Please refer to response 1 regarding the new proposed action (Alternative 6).

18. Comment: The only climbing routes being removed are the ones that potentially affect highway safety. No routes are being removed for the purpose of site restoration/rehabilitation. How camouflaging climbing equipment can be considered restorative or rehabilitative is not explained.

RESPONSE: The new preferred alternative (Alternative 6) proposes the removal of all climbing routes to restore the setting, feel, and association of the TCP. Please refer to response number 1 regarding the new alternative and response to comment numbers 10 and 12 regarding safety. The camouflaging of climbing equipment would reduce the visual effects of permanently affixed equipment.

19. Comment: The LTBMU Forest Plan directs the Forest Service to avoid/protect Native American religious sites and encourages the reestablishment of Washoe ties to Lake Tahoe (Practice 10, Cultural Resource Management, page IV-24).

RESPONSE: This is true. The Forest Service LTBMU has taken many steps over the past several years to cooperate and involve the Washoe Tribe in resource management issues at Lake Tahoe. The public involvement meetings and discussions that have occurred over the past 2 years as part of the development of the Cave Rock Management Plan and development of the new proposed action is responsive to this. Please refer to response 1 regarding the new proposed action (Alternative 6).

20. Comment: The Washoe have continuously maintained that (Cave Rock) is damaged by the physical alterations made by climbers and by their presence. In cases of conflict is recreation to be given priority over cultural resource?

RESPONSE: The Forest Service has developed a new preferred alternative (Alternative 6) that restricts climbing at Cave Rock, effective immediately upon implementation. According to the Forest Plan page IV-18 the preservation of cultural resources determined or believed to be of significance take priority over recreation facilities and uses (see chapter 3, page 4 of the Cave Rock FEIS).

21. Comment: The President's Order #13007 directs Federal Agencies to avoid adversely affecting the physical integrity of Indian sacred sites. (This is above and beyond National Historic Preservation Act regulations.)

RESPONSE: This comment was directed to the Cave Rock Draft EIS preferred alternative (Alternative 2). That alternative would not have authorized any activity that would have affected the physical integrity of Cave Rock. Climbing hardware that is already present would have been allowed to remain, but no new physical affects would have been authorized. Some routes and climbing hardware would have been removed, restoring some areas that had been previously affected. The new preferred alternative (Alternative 6) will eliminate all climbing hardware and restore physical disturbances at Cave Rock.

Respondent #7 – Eric Perlman

22. Comment: I support removing the eight climbing routes that endanger highway traffic and retaining all other routes with reasonable anchor and sling camouflage.

RESPONSE: Thank you for your comment. However, the Forest Service has identified a new proposed action that would eliminate climbing as an activity and all climbing paraphernalia. For more information please refer to response to comment 1.

23. **Comment:** Climbers visiting Cave Rock have cleaned up the trash and graffiti, improving the area.

    RESPONSE: We appreciate that the climbing community has contributed a great deal of effort towards removing trash that had accumulated in the area.

24. **Comment:** No religious or cultural group should ban others from using public property.

    RESPONSE: The intense use of the National Forests compels the Forest service to set priorities for land use and management. Existing regulations and policy address the prioritization and protection of natural, cultural, and historic resources. The Forest Service has developed a new proposed action (Alternative 6) intended to protect the historical and cultural resources of the site, while maintaining public access.

25. **Comment:** Cave Rock is a scenic and recreational resource that should be open to all. Everyone should feel welcome at Cave Rock.

    RESPONSE: The Forest Service agrees that everyone is welcome on National Forest lands. By taking the proposed action the Forest Service is not preventing the public from accessing Cave Rock. However it is the responsibility of the Forest Service to manage the activities occurring on public lands. The selection of Alternative 6 as the new preferred alternative proposes to limit the activities occurring on and within this designated Historic District to those consistent with the historic period. (Please see response to comment 24).

26. **Comment:** The constructed masonry should not be removed.

    RESPONSE: The masonry in the cave has been identified as an adverse effect to the Traditional Cultural Property. Therefore it should be removed to restore the interior of the cave to more accurately reflect the historic setting, feel, and association of the Traditional Cultural Property. In the new proposed action (Alternative 6) the masonry floor inside the cave would be removed. using wheelbarrows, sledgehammers, hammers, prybars, etc. Come-alongs would be used to move the multi-ton boulders currently used as seating. The intent of these actions is to restore the setting and materials of the TCP to that more closely resembling the historic period

Respondent #8 – Steven Piper

27. **Comment:** The most important issues are reasonable access and (climber) safety to the existing routes that are being climbed.

    RESPONSE: Thank you for your comment. The Forest Service agrees that safety is an issue and many of the alternatives address aspects of this. In addition, the new proposed action (Alternative 6) maintains access to all parties interested in and concerned about Cave Rock. However, the new proposed action eliminates activities inconsistent with the historic period. Please refer to response to comment 1 for more information.

28. **Comment:** The rock climbers have had a positive influence on cleaning up Cave Rock. This should be noted in the background section (of the Final EIS).

    RESPONSE: We appreciate that the climbing community has contributed a great deal of effort towards removing trash that had accumulated in the area. These efforts are recognized in chapter 3 of the FEIS.

29. **Comment:** The constructed masonry should not be removed.

    RESPONSE: Please see response to comment 21 above.

30. **Comment:** Climbing activities do not inherently reduce the historical and spiritual integrity of the site.

    RESPONSE: The findings of Forest Service and Tahoe Regional Planning Agency consulting cultural resource specialists has determined that the presence and activities of climbers and the presence of their equipment diminishes the setting, feel and association of the TCP. The Nevada SHPO and the Advisory Council on Historic Preservation have concurred with this determination.

31. **Comment:** The Forest Service should resist change in ownership that would close public lands to the public.

    RESPONSE: The alternative that considered change of ownership was eliminated from detailed study in the Final EIS. Please see Final EIS, chapter 2.

Respondent #9 – John Robinson

32. **Comment:** The constructed masonry should not be removed.

    RESPONSE: Please see response to comment 21 above.

33. **Comment:** The highway tunnel through the rock has done infinitely more damage to the rock than any climber.

    RESPONSE: The highway tunnels have certainly damaged and changed Cave Rock to a great extent. However, the ability of Cave Rock to retain its significance to the Washoe people in spite of these changes is testimony to the properties importance. The construction of these tunnels occurred during the historic period and therefore has become part of the history of this evolved property. Rock climbing at Cave Rock is an activity that has only recently impacted the property and is not associated with the historic period.

Respondent #10 – Penny Rucks

34. **Comment:** Cave Rock is one of the most significant historic properties in the LTBMU. How is a proposed action (Draft EIS) that validates sport climbing and opens the door for future

inappropriate use consistent with the purpose and need statement of affording protection to the Cave Rock heritage resource?

RESPONSE: The Forest Service recognizes the importance and value of Cave Rock as a cultural and historic resource in the LTBMU. In addition, the Forest Service has developed a new proposed action (Alternative 6) for the Final EIS. This action is more consistent with the purpose and need which states: *the purpose [of this action] is to protect the Cave Rock heritage resource and regulate uses there in a manner that, consistent with mandates and restrictions of law and regulation, preserves the historic and cultural characteristics that make the property eligible for listing in the National Register.*

35. **Comment:** (The Forest Service's) assertion that the proposed action *may* affect the historic property is misleading. Inappropriate uses, out of character with the values and period of significance that make the properties eligible, of themselves, constitute an adverse effect. Did the LTBMU determine there was any question about the adverse effect sport climbing poses as an activity?

    RESPONSE: Yes, the Forest Service did determine that sport climbing poses an adverse effect as an activity. This statement will be changed in the Final EIS. The Forest Service has considered the effects of climbing and has developed a new proposed action, Alternative 6, which will eliminate climbing. Please see response to comment number 1 for more detail.

36. **Comment:** The proposed action (Draft EIS) fails to acknowledge the *cumulative effect* of continued climbing; the precedent sport climbing sets, encouraging future uses that will continue to degrade the character of the property.

    RESPONSE: Thank you for your comment. Cumulative effects of other land use activities, not within the Forest Service authority to regulate, that may affect the setting, feel, and association of the Cave Rock Traditional Cultural Property are described in table 3-X in chapter 3 of the Final EIS. At this time we are not aware of sport climbing setting any precedent for future activities inconsistent with the historic period. The implementation of the new proposed action will eliminate climbing and prohibit new activities inconsistent with the historic period.

37. **Comment:** The religious exclusion rationale undermines TCPs as legitimate resources. Since religious properties are not eligible to the National Register, if it is agreed that Cave Rock is a TCP, it cannot be a religious property. The qualities you would be enhancing at Cave Rock relate to the history and traditions of the Washoe Indians.

    RESPONSE: This is a very important point and will be considered when making the decision for the EIS.

38. **Comment:** Your proposed action provides no consideration to the adverse effect diminishing Cave Rock's values as a TCP will have on the recreational and educational opportunities for the public at large and does nothing to present the benefits of managing the federal portion of Cave Rock to maximize its "ability to convey its significance" to the general public. "Heritage tourism" is a viable recreational opportunity for the international public (visiting Lake Tahoe).

RESPONSE: The Forest Service acknowledges your comment. The new proposed action provides greater protection of Cave Rock's TCP and other historic and cultural features. Please refer to response number 1 regarding the new preferred alternative.

39. Comment: The Draft EIS preferred alternative suggests that heritage values are only important to the one group. The NHPA is clear that heritage resources are part of our national interest and promote awareness, interest and respect for the complexity and rich diversity of this nation's heritage.

RESPONSE:
This is an important point. In the National Historic Preservation Act, Congress found and declared that :

the spirit and direction of the Nation are founded upon and reflected in its historic heritage; …the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people; …the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans….

Clearly, Congress intended that National Register properties were of National and not just local or regional value.

40. Comment: The proposed action (Draft EIS) trivializes the importance of Washoe history and culture as questions of belief and characterizes historic properties in general, as resources that impede rather than enhance the public experience. Your rationale that the public at large is best served by emphasizing recreation uses that clearly affect the integrity of Cave Rock to the rest of the non-climbing public devalues the status of Washoe heritage and history and enhances the notion that Indian history and its monuments are somehow of less importance and due less respect than monuments of other historic events.

RESPONSE: It is not the intention of the Forest Service to "devalue Washoe heritage" and we believe the new proposed action reflects this. The rationale leading to this decision is reflected in the FEIS, please see chapter 3 of the FEIS. Please refer to response 1 regarding the new proposed action.

41. Comment: This action should not be the religious values of one group against the rights of the public.

RESPONSE: The new preferred alternative of the Forest Service is intended to protect Cave Rock as a significant historic resource under the National Historic Preservation Act. As stated in several preceding responses, the only activity that will be restricted under the proposed action is climbing. All other recreation activities consistent with the historic period (defined in response number 32) would be permitted. The action proposed by the Forest Service is consistent with Federal laws and executive orders including National Register Bulletin 38; the American Indian Religious Freedom Act of August 11, 1978; and Indian Sacred Sites Executive Order No. 13007.

42. Comment: The LTBMU should ask (itself) what heritage values at Cave Rock mean in terms of a balanced recreation program and its obligation to manage a representative sample of the nation's heritage under its jurisdiction.

RESPONSE: The new preferred alternative (Alternative 6) will remove all routes on Cave Rock and emphasizes cultural and historic resource protection consistent with the Forest Plan. Although this alternative restricts rock climbing, the Forest Service believes it is also a balanced alternative that allows a variety of uses (i.e., fishing, sightseeing, picnicking, hiking, boating, etc.), consistent with the historic period at Cave Rock, to continue. The Traditional Cultural Property historic period is that from time immemorial through the life of Henry Rupert, 1885–1965. Henry Rupert was a Washoe shaman and subject and informant of the only ethnographic study of Washoe shamanism. Please refer to response numbers 1, 6, and 9.

43. Comment: What impact to the public at large would there be to restricting recreational uses at Cave Rock to those that do not introduce elements incompatible with its traditional values and period of significance (i.e., any use requiring modern or technical equipment).

RESPONSE: According to the Washoe Tribe, all activities other than visits by Washoe practitioners compromise traditional values (see Chapter 3 pages 18-19 of Final EIS). However, restricting activities incompatible with the historic period is what the new proposed action prescribes. Public access will be allowed, but specific activities will be restricted.

44. Comment: Since there will be climbing restrictions, how will the LTBMU regulate and enforce these new rules including restrictions on new routes and bolt replacement?

RESPONSE: Alternatives 2-6 in the Final EIS include provisions for regular Forest Service patrol to ensure compliance with current and future access restrictions. With the new proposed action, climbing paraphernalia will be removed effectively eliminating climbing and the need for ongoing patrol to ensure climbing ceases. Forest Service patrols will routinely observe and monitor the Cave Rock area to ensure bolts are not replaced. In addition, these Alternatives include a provision for instituting a Cave Rock Education Program. Please see Chapter 2 of the Final EIS.

45. Comment: Since Cave Rock is eligible for the National Register; the Forest Service legally must minimize adverse effects, just as other cultural sites are protected.

RESPONSE: The National Historic Preservation Act directs Federal Agencies to take into account the effects of agency undertakings on significant historic properties. The act does not require protection of these properties. The National Environmental Policy Act also directs Federal Agencies evaluate the effects of agency actions on the human environment and mitigate adverse effects wherever feasible. In the case of the Cave Rock Management Plan all alternatives have significant environmental effects to either heritage resources or recreation. It is the responsibility of the Forest Service to weigh the potential impacts, make a decision, and ensure that implementation includes associated mitigation measures. The new preferred alternative (Alternative 6) reduces the identified adverse effects to historic properties at Cave Rock significantly.

Respondent #11 – Graham Sanders

46. Comment: I support the proposed action (in the Draft EIS), but am concerned about removal of the masonry floor.

RESPONSE: Please see response to comments 9 and 21 above.

Respondent #12 – Mark and Tracy Weber

47. Comment: Cave Rock's proximity to (uses including) the highway, recreational power boating, and other valid recreational activities may make it difficult for "spiritual practitioners", but (this should be expected) when worshiping on public lands used by others.

RESPONSE: One of the challenges the Forest Service faces in developing this management plan is finding the proper balancing point that does not violate the Establishment Clause of the constitution. We believe that the new preferred alternative does not restrict access to Cave Rock for any religious purpose, nor does it establish a religion. Restrictions of recreational uses limit activities that are inconsistent with the properties historic values and period of significance.

48. Comment: The rock climbers have enhanced Cave Rock by removing garbage and refuse.

RESPONSE: We appreciate that the climbing community has contributed a great deal of effort towards removing trash that had accumulated in the area.

49. Comment: Describe technical climbing experience in other areas of Lake Tahoe; if climbing is allowed at Cave Rock, it should be under the stipulation that this level of technical experience cannot be found anywhere else in the Lake Tahoe Basin.

RESPONSE: A variety of rock climbing experiences are available in the Lake Tahoe area. However the degree of difficulty found at Cave Rock is not available within a few hours commute. The experience combined with the location on the shore of Lake Tahoe is certainly unique and not available in other locations. Please see chapters 2 and 3 of the Final EIS for description of qualities that make Cave Rock a "superior and unique climbing experience."

Respondent #13 – Paul Minault, The Access Fund

50. Comment: The preferred alternative (in the Draft EIS) represents a well-considered compromise.

RESPONSE: Thank you for your comment. The Forest Service believes the new preferred alternative (Alternative 6) better protects the historic property while maintaining access to the general public and allowing activities consistent with the historic period. The historic period is defined in the FEIS as time immemorial to 1965, the time of Henry Rupert death. Henry Rupert was a Washoe spiritual practitioner whose association with Cave Rock contributed to its National Register eligibility.

51. Comment: Cave Rock is an important public resource within the Lake Tahoe basin that should remain accessible to the public and to all groups to whom it holds special importance.

RESPONSE: The Forest Service agrees on the importance of Cave Rock as an important area for a variety of competing recreational values. The new preferred alternative (alternative 6) presented in the FEIS will further protect the resources at Cave Rock while maintaining public access to all groups.

52. Comment: We support mitigation measures proposed in the (Draft EIS) to reduce the impacts of climbing.

RESPONSE: Extensive collaborative meetings and Section 106 consultations with the Washoe Tribe, Nevada SHPO, the Advisory Council on Historic Preservation, and other interested parties did not identify mitigation measures that would adequately reduce the impacts of climbing on the TCP to the level of no significant adverse effect. The new preferred alternative (Alternative 6) would eliminate the impacts of climbing and restore the site by removing climbing hardware.

53. Comment: We support voluntary temporal restrictions on climbing at Cave Rock to allow Washoe practitioners to engage in traditional cultural practices at the site.

RESPONSE: The Forest Service acknowledges your comment. However, unlike the cultural practices of some American Indian tribes (i.e., American Indian use of Devil's Tower National Monument during the month of June), the Washoe practitioners do not use Cave Rock on a scheduled basis, but only when the need arises due to specific situations within the tribe. Therefore, a regularly scheduled voluntary closure would not be feasible.

Respondent #14 – Don Kilma, Advisory Council On Historic Preservation

54. Comment: We noted an error in interpretation of the Council's regulations. Chapter 3, page 27, paragraph 3 states that "effects from the proposed action and alternatives to the transportation district or archaeological properties have foreseeable mitigation measures that, if implemented, would routinely result in no adverse effect determinations." This is not the case under the current regulations (36 CFR Part 800), which went into effect on June 17, 1999. Examples provided in this paragraph of the Draft EIS may be appropriate forms of mitigation, but they are considered "adverse effects" under the current Criteria of adverse effect at 36 CFR 800.5(a)(1) and (2).

RESPONSE: Thank you for your comment and clarifying this issue. This statement in chapter 3 will be corrected.

55. Comment: The Forest Service's preferred alternative (in Draft EIS) does not appear to sufficiently balance the interests of historic preservation and other uses, nor to protect the historic values associated with Cave Rock from activities incompatible with traditional cultural use…The preferred alternative appears to be weighted more toward the protection of the rights of climbers than for the protection of historic values. Because of this we believe the Forest Service should consult further with the Washoe Tribe, the Council, the SHPO, and others toward finding an alternative that better protects the historic values associated with Cave Rock.

RESPONSE: Thank you for your comment. The Forest Service is continuing its consultation with the Washoe Tribe, the Council, the SHPO, and other interested parties as part of its compliance with Section 106 of the National Historic Preservation Act. In addition, the FEIS has incorporated a new proposed action (alternative 6), which would effectively eliminate climbing. Through this action it is the intention of the Forest Service to protect the historic resources while allowing continued access of the general public and activities consistent with the historic period.

56. **Comment**: Establishment Clause concerns behind choosing an alternative that is more protective of the historic, traditional cultural characteristics of Cave Rock would be misplaced. The purpose behind a more protective alternative would not be to promote Washoe beliefs. Rather, the purpose would be secular, providing for the management of Federal land in a way that protects historic properties already determined eligible for listing on the National Register, and complying with the statutes Section 800.6 (a), American Indian Religious Freedom Act, Executive Order No. 13007, and Executive Order No. 12898.

    RESPONSE: The Forest Service has selected a new alternative (Alternative 6) as the new preferred alternative. The purpose of this alternative is to better protect the cultural and historic resources identified at Cave Rock. The intent is to provide protection, not promote or condone Washoe beliefs.

Respondent #15 – John Hoffman, Donner Ski Ranch

57. **Comment:** There is a major highway running through the middle of Cave Rock and historical artifacts were removed years ago; therefore physical evidence of the site's historical significance is gone.

    RESPONSE: Although Highway 50 has two tunnels through Cave Rock, physical evidence of the site's historical significance still remains. Cave Rock is eligible to the National Register of Historic Places as a Traditional Cultural Property (TCP), as an historic transportation district, and as an archaeological site. As a TCP, evidence of the sites historical significance can be found in the beliefs and testimony of the Washoe people themselves, in the literature associated with Washoe mythology and in the ethnographic record. The road prisms themselves and the trestle supports and walls serve as physical evidence of the transportation district, and the artifacts that were excavated in the 1950s from the cave provide physical evidence of the archaeological deposit.

58. **Comment:** Climbers have removed the trash and cleaned up the site making Cave Rock a place to be proud of.

    RESPONSE: We appreciate that the climbing community has contributed a great deal of effort towards removing trash that had accumulated in the area.

Respondent #16 – Bob Fulkerson, Progressive Leadership Alliance of Nevada (PLAN)

59. **Comment:** Rock climbing compromises the integrity of Cave Rock and impedes access for ceremonial and cultural activities. The Washoe practitioners will be unable to have meaningful

cultural experiences there. The idea that rock climbing can be managed to (have climbers voluntarily leave) when Washoe practitioners are there is disingenuous.

RESPONSE: The Forest Service has developed a new Preferred Alternative (Alternative 6). This alternative eliminates climbing and is responsive to this concern. Refer to response number 1 for more detail.

60. Comment: By selecting Alternative 2 the Forest Service appears to be more interested in accommodating climbers than protecting the spirituality of the property.

RESPONSE: Please see response to comment numbers 1 and 58 and alternative 6 in the Final EIS

61. Comment: Due to the fact that there are 150 named climbing areas in Tahoe, the one place of such spiritual power for the Washoe should be protected for everyone who values the diversity of our national heritage.

RESPONSE: The Forest Service acknowledges your comment. Please refer to response to comment numbers 1 and 58 regarding the new preferred alternative.

Respondent #17 – Alice M. Baldrica, State Historic Preservation Office, State of Nevada

62. Comment: The Washoe Tribe considers continued rock climbing on Cave Rock to be adversely affecting this traditional cultural property.

RESPONSE: The FEIS acknowledges this view and has determined rock climbing an activity that has significant environmental effect to heritage resources. Further consideration of the proposed action by the Forest Service has lead to the development of a new proposed action, which would eliminate climbing and therefore provide greater protection to both the integrity and traditional use of the property.

63. Comment: The Forest Service determined (letter from Harris to Baldrica, September 27, 1997) that continued rock climbing posed a threat to both the integrity of the property and impeded access to the rock for ceremonial purposes. It is clear from the evidence presented in the Draft EIS that rock climbing adversely affects the setting, feeling, and materials at Cave Rock.

RESPONSE: Please see response to comment 61 above. Although rock climbing would be effectively eliminated as an activity at Cave Rock, other activities consistent with the historic period would continue. The implementation of Alternative 6 should help protect and restore the setting, feeling, and materials of the historic and cultural resources at Cave Rock.

64. Comment: Regardless of the improvements proposed (in the Draft EIS), rock climbing is just one more use that is cumulatively making it more difficult for the Washoe to continue practices important to the maintenance of their culture.

RESPONSE: The Forest Service has prepared a new proposed action that will further reduce impacts to the cultural and historic resource of Cave Rock. Please refer to response to comment 1 for more detail.

65. **Comment:** Resolution of issues relating to the masonry and graffiti eradication need to occur before the Draft EIS is made final.

    RESPONSE: In the new preferred alternative (Alternative 6) graffiti will be removed that is not related to the historic districts. Graffiti will be removed through washing without chemicals. The masonry will also be removed using wheelbarrows, sledgehammers, hammers, prybars, etc. Come-a-longs would be used to move the multi-ton boulders currently used as seating. The intent of these actions is to restore the setting and materials of the TCP to that more closely resembling the historic period.

Respondent #18 – Cynthia A. Ellis, United States Dept. of the Interior, Bureau of Land Management

66. **Comment:** As seen in the case *Bear Lodge Multiple Use Assoc. vs. Babbitt,* requesting rock climbers to voluntarily stop climbing when Native Americans were performing religious ceremonies is controversial. In this case, the climbers voluntarily complied with the request; however, the concessionaires who were financially dependent on the climbers, charged that the National Park Service was violating First Amendment rights of non-Indians. The U.S. District Court dismissed the claim and upheld the temporary ban on climbing.

    RESPONSE: Thank you for your comment.

Respondent #19 – David J. Farrel, United States Environmental Protection Agency, Region IX

67. **Comment:** The EPA has assigned a rating of LO (Lack of Objections) to the DEIS. We encourage the Forest Service to continue its consultation with the Washoe Tribe to ensure that the final decision is fully consistent with the Executive Order on Indian Sacred Sites.

    RESPONSE: Thank you for your review of the Draft EIS. The Forest Service is currently continuing its consultation with the Washoe Tribe and other interested parties as part of the Section 106 of the National Historic Preservation Act compliance. This will ensure its final decision is consistent with the Executive Order on Indian Sacred Sites.

Respondent #20 – A. Brian Wallace, Washoe Tribe of Nevada and California

68. **Comment:** The USFS proposed management plan fails to sufficiently avoid, mitigate, or minimize the known and acknowledged adverse effects of technical rock climbing. Unlike the NEPA, the NHPA does not just require process; it actually requires an adequate degree of mitigation of adverse effects. The 9th Circuit Court's discussion in *Muckleshoot Tribe v. USFS* indicated that mitigation that preserves the sites significant historic features is required where such mitigation is possible.

    RESPONSE: Thank you for your comment. The new proposed action, Alternative 6, eliminates climbing and thus reduces the acknowledged adverse impacts to the historic and cultural

resources. This action also helps partially restore the setting and feel of the TCP to the historic period.

69. **Comment:** The DEIS fails to provide sufficient analysis on the potential adverse effects caused by (rock climbing according) to the adverse effects criteria set forth (in) the National Historic Preservation Act.

    RESPONSE: The Forest Service has determined that rock climbing adversely affects the setting, feel, association and materials of the Cave Rock TCP. The Nevada SHPO and ACHP have concurred with that determination.

70. **Comment:** The DEIS fails to appropriately consider alternatives to the preferred alternative, which are more consistent with the basic policy objectives than the considered alternatives. The Forest Service could support the Washoe Tribes request to Congress to have the property turned over to the Tribe. The DEIS did not consider any alternative that incorporates Washoe stewardship of the property (for which there is precedent in the LTBMU).

    RESPONSE: These alternatives, land transfer and land stewardship, were both addressed in Section 2.3 Alternatives Considered but Eliminated from Detailed Study. The later was dismissed because, while the Forest Service has the authority to issue special-use permits, such as the Washoe tribe has for Meeks Bay Resort, such permits do not transfer land management authority for the area in question. As explained in the DEIS, Washoe stewardship would not relieve the Forest Service of the responsibility of providing management direction for the area. Management decisions would remain the Forest Services responsibility; the Washoe would simply be responsible for implementing them. Forest Service support of Congressional actions to transfer property out of public ownership is a National issue and not appropriate for this local decision concerning how the Forest Service will manage the property.

71. **Comment:** There seems to be a great deal of agency anxiety and confusion created because this is a historic cultural site associated with an Indian Tribe…and the significance of Cave Rock is not associated with Anglo-American culture or history.

    RESPONSE: Cave Rock is eligible to the National Register of Historic Places as a Traditional Cultural Property (TCP), as a historic transportation district, and as an archaeological site. This designation reflects a broad range of time periods and cultural histories.

72. **Comment:** Rather than protecting the integrity of the critical relationship between the traditional use and the TCP, the preferred management plan places all the responsibility on the elderly traditional practitioners (who may feel threatened or uncomfortable with the burden of asking climbers to leave). This is a foreseeable adverse impact that could have a devastating impact on the integrity of the relationship between traditional cultural uses and the TCP, and it was not considered at all in the DEIS.

    RESPONSE: The new preferred alternative (Alternative 6) eliminates the conflict between Washoe elders and climbers, however it will not eliminate contact with others recreating at Cave Rock (i.e., hikers, people fishing, boaters, picnickers, etc.), the same kind of uses as when Washoe doctor Henry Rupert visited Cave Rock. Please refer to response 1 regarding the new preferred alternative.

73. Comment: The Tribe objects to the tiering of the DEIS on the EIS for the Roundhill Management Area Direction. The USFS did not assign Cave Rock to that area, and in fact, did not realize it had management authority over Cave Rock at the time that NEPA process was conducted.

RESPONSE: The Forest Service will assign Cave Rock to the Genoa Management Area of the Forest Plan. Tiering is an appropriate part of the environmental planning process where a regional management plan (i.e., the Forest Plan) provides policy guidelines and subsequent management plans (i.e., Cave Rock Management Plan) provide for policy and management changes to a specific area, incorporating the regional plan by reference. This EIS will amend any previous oversights to the Forest Plan.

Respondent #21 – Chris Belizzi

74. Comment: Concern that the preferred alternative in the Draft EIS would remove too many routes. Special concern regarding the loss of the rat midden route was expressed.

RESPONSE: The old preferred alternative (Alternative 2) would have eliminated a number of routes that posed health and safety hazards to highway travelers as well as the route near the rat midden. The new preferred alternative (Alternative 6) will remove all routes on Cave Rock.

75. Comment: Concerned about people trashing the place up.

RESPONSE: The new preferred alternative (Alternative 6) includes a provision for instituting a Cave Rock Education Program. In addition, it includes provisions for regular Forest Service patrols to ensure compliance with current and future access restrictions. Please see chapter 2 of the FEIS.

Chapter 5
Letters Received During Public Comment Period

Chapter 4 explained the public participation process associated with the development of this FEIS. Substantive comments received on the DEIS were summarized with the corresponding Forest Service response. This chapter includes copies of the letters and meeting notes from which these comments were summarized. Notice that each respondent is given an index number. This number is written in at the bottom of each letter and can be used to cross-reference the letter to the previous chapter.

List of Respondents and Page Numbers

Chapter 6
References Cited

Printed References

Bass, Ronald E., Albert I. Herson, and Kenneth M. Bogdan. 2001. *The NEPA Book: A Step-by-Step Guide On How To Comply With The National Environmental Policy Act.* Solano Press Books, Point Arena, CA.

Child, Greg. 1994. "Postcards from the Edge: Climbing meets Big Brother. Land Managers, Environmentalists, and Climbers Come to a Draw on Fixed Anchors." Article printed in *Climbing Magazine* February 1–March 15, 1994, p. 66.

Davidson, Sam. 1994. "Access Quid Pro Quo: A Crucial Workshop Debates the Future of Fixed Anchors." Article printed in *Rock and Ice*, Issue 58, p. 128.

Davidson, Sam. 1997. "The Sacred and the Profane—Should Climbers Just Say 'No' to Climbing at 'Sacred Sites?'" Article printed in the Access Fund newsletter, fall 1997.

Grimm, Lydia. 1997. "Sacred Lands and the Establishment Clause: Indian Religious Practices on Federal Lands." Published in *Natural Resource and Environment*, vol. 12 (summer), number 1, pp. 19–24, 78.

King, Thomas. 1998. *Cultural Resource Laws and Practice: An Introductory Guide*. AltaMira Press. Walnut Creek, California.

LSA Associates, Inc. 1998. *Draft Cave Rock (*De'ek Wadapush*) Heritage Resources Protection Management Plan*. Draft report submitted to Tahoe Regional Planning Agency, Lake Tahoe, Nevada.

Outdoor Leadership School. 1997. "Leave No Trace Outdoor Skills and Ethics: Rock Climbing." *Leave No Trace Skills and Ethics Service*, Volume 8.0.

Parker, Patricia, and Thomas King. 1990. *National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties*. U.S. Department of the Interior, National Parks Service, Interagency Resources Division.

Rockwell, Dave. "So–why do you climb, anyway?" Unpublished essay, provided to the Forest Service at Cave Rock Discussion Session 4.

Rucks, P. 1996. *Cave Rock Draft Nomination* (26-Do-1). Draft Report Submitted to Nevada State Historic Preservation Office. U.S. Department of Agriculture, Forest Service LTBMU, South Lake Tahoe, California.

Personal Communications

Baldrica, Alice. Nevada State Historic Preservation Office. Carson City, Nevada. December 18, 1996– letter to Robert Harris, forest supervisor, LTBMU.

Dancingfeather, William. Washoe Tribe of Nevada and California, cultural resource coordinator. June 2, 1999–personal communication.

Gleichman, Carol. Advisory Council on Historic Preservation. Washington, D.C. April 30, 1997–letter (Re: Determination of Adverse Effect and No Adverse Effect Regarding Rock Climbing at Cave Rock, Nevada) to Robert Harris, forest supervisor, LTBMU.

Gustafson, Maribeth. U.S. Forest Service, Lake Tahoe Basin Management Unit, Forest Supervisor. February 1, 2001– letter to Carol Gleichman, Advisory Council on Historic Preservation

Harris, Robert. U.S. Department of Agriculture, Forest Service LTBMU. South Lake Tahoe, California. August 27, 1996, and December 5, 1996–letters (file designation 2360) to Nevada State Historic Preservation Office.

Klima, Don. Advisory Council on Historic Preservation March 21, 2001– letter to Maribeth Gustafson

Pierko, Julie. Nevada Department of Transportation. March 12, 2002–personal communication

Sanders, Graham. Local Rock Climber –personal communication with Lisa O'Daly US Forest Service, Lake Tahoe Basin Management Unit, Planner.

Appendix A
Collaboration Summary

Summary, Cave Rock Collaboration Effort
January to May, 1998

Prepared by Jan Cutts, Collaboration Facilitator

Background and Introduction: The pre-NEPA collaboration effort for Cave Rock has been an intensive process of public participation. The emotional connection people have to Cave Rock is exemplified in the deep feelings about how Cave Rock should be managed were expressed at the discussion sessions. The two primary stakeholders in this effort, the Washoe tribe and rock climbers, both have strong connections to the area. Cave Rock is central to the Washoe tribe's traditional cultural beliefs and practices. The cultural values surrounding Cave Rock, specifically, maintaining its integrity as a traditional sacred location, is a great motivating factor for this group's involvement in the discussions surrounding Cave Rock management. Rock climbers' ties to Cave Rock are also very strong. As a world-reknown climbing area with highly challenging routes and breathtaking views, this site is important to the local climbing community, as well as to climbers nationally and internationally. The desire to keep this location open to future climbing is the driving force for the climber interest in management of Cave Rock.

The purpose of a collaborative effort before beginning NEPA at Cave Rock was to gain a better understanding of the key stakeholder interests; to increase sharing, learning, and understanding of Washoe Tribe and rock climbers perspectives; to better define the issues at Cave Rock and increase understanding of the activities occurring there; and to identify possible management practices for the Cave Rock area.

The strategy developed by the Lake Tahoe Basin Management Unit (LTBMU) for involving interested members of the public in dialog about the key issues at Cave Rock included holding a number of public discussion session. These meetings would focus energy of the participants toward identifying the issues, and working together to develop some ideas for possible management of Cave Rock.

The meeting locations were chosen based on the demographics of the first meeting, indicating that approximately half of the participants travelled from Reno / Carson City / Gardnerville / Minden, Nevada, and half the participants came from South Lake Tahoe, CA vicinity. A few participants also came from other areas such as Truckee and Tahoe City.

Detailed notes of all meetings were compiled and distributed to the Cave Rock mailing list.

MEETING PROCESS AND CONTENT

Meeting #1, January 22, 1998
6:30 to 9pm, Zephyr Cove Restaurant, Zephyr Cove, NV

The purpose of this meeting was to bring the Washoe and rock climbing communities together in an informal setting, to promote sharing, learning and understanding of the rock climbing and Washoe tribal perspectives, and to determine if these groups want to work together at a collaborative level on the issues surrounding Cave Rock. This dinner meeting took place at the Zephyr Cove Lodge restaurant, to provide a more comfortable setting for this first gathering.

To encourage mixed table groups, meeting participants were asked to sit at tables with people they did not know. The evening began with welcome and introduction to the plans for the meeting. Speakers from the Washoe Tribe and the climbing community made presentations about their perspectives and interests at Cave Rock.

A Washoe elder, Jean McNicoll, spoke of Washoe history in the region and their ties to Cave Rock. She expressed concern about climbing on this rock and that the Washoe did not approve of it. She stated that the Washoe want to have dialogue about the future of Cave Rock, and don't want confrontation.

The local climber, Terry Lilienfield, expressed her feelings about Cave Rock, that climbers respect and value Cave Rock. She said that climbers feel Cave Rock is a special and unique climbing area as well as a powerful and spiritual place. She stated that climbers want to show respect for the Washoe culture and want to find some common ground with the Washoe over the future use of Cave Rock.

At the conclusion of the speakers' presentations, the table groups were given assignments to guide discussions toward the issues and visions surrounding Cave Rock. Each table was asked to have a note-taker so the discussions could be recorded and shared later through meeting notes.

Since many people at the meeting did not know each other, *Assignment #1* was for each person to introduce themselves and share what their interest in Cave Rock is. The attendance at this meeting was larger than anticipated. We had expected 35 to 40 people, and 80 people attended. Most individuals cooperated with our request to have tables with a mix of participants, and the result was great dialog during the small table work. The participants were about half with climbing interests and half with Washoe interest.

Assignment #2 was designed to pull out the main issues at Cave Rock, so each person was asked to complete the statement "The issues surrounding Cave Rock are important to me because...". This assignment focused the discussion on what people's concerns are and why they are concerned.
To identify the participants desires for Cave Rock, *Assignment #3* was for each person to complete the statement "My ideal Cave Rock is ...". Visions of how Cave Rock could be or should be in the future were shared during this section.

Each assignment was given separately and with a set amount of time for completion. After the third assignment was completed, time was allowed for sharing from the participants about what they learned at their tables, and to ask any questions of the other participants. There was a tendency by some of the participants to dive into the issues and debate them or develop solutions for them. These efforts were suppressed with the promise that there would be a time and place to do this work. The group was asked if they wanted to continue work in a collaborative way to address the Cave Rock issues. The majority of the group indicated that they were interested and would come to future meetings.

Meeting #2, March 10, 1998
6:30 to 9pm, South Lake Tahoe High School Library, South Lake Tahoe, CA

The purpose of this meeting was to better refine the issues identified at the January 22nd meeting. A presentation of the National Historic Preservation Act and National Register eligibility determination of Cave Rock by a LTBMU archaeologist was made. This presentation was intended to explain the process and results of the evaluation. There were some questions about why climbing was the only activity addressed in the evaluation, and it was explained that climbing was the key activity occurring under National Forest jurisdiction, and the only activity that the Tribe had expressed concern regarding to Forest Service representatives at the time. Updates on the title search for the Cave Rock area and the recent TRPA Phase II team meeting were also given at this time.

The group work for the evening was introduced with a summary of the January meeting, specifically, what issues were identified. The group was then given four tasks for the evening, and asked to chose one to work on. These tasks asked for specific information about the issues at Cave Rock, and they included:

Task #1 What I perceive the concerns about climbing at Cave Rock to be, and why? (Use specific examples and define/explain why they are a concern). (Intended to get specific issues about climbing at Cave Rock).

Task #2 What is special about Cave Rock to climbers, and why? (Use specific examples of the activities and explain why they are special). (Intended to get specific information about climbing needs at Cave Rock)

Task #3 At the 1/22/98 meeting, climbers expressed that they feel singled out as a problem at Cave Rock. What other activities besides climbing at Cave Rock are of concern to anyone, and why? (Use specific examples of the activities and explain why they are a concern). (Intended to identify other issues at Cave Rock)

Task #4

A. Specifically for non-climbers: What activities do you think climbers are doing at Cave Rock?

B. Specifically for non-Washoe Tribal members: What do you think Cave Rock provides to the Washoe, and why are they concerned?

(For both, name the concern(s) and define/explain why it is an issue). (Intended to identify perceived activities and needs at Cave Rock)

The activities at the tables ranged from keeping on task and developing lists quickly to fits and starts at the process, with diversions into debating one "side" or another, needing explanation of climbing terminology and methodology, and simply taking time to share more feelings and concerns.

The groups reported their lists at the end of the evening. Some large group discussion took place, and some issues that came up were: Climbers would understand if Cave Rock was closed to everyone, but don't understand why they would be singled out; Climbers are willing to do just about anything to retain access to the rock for climbing; It appears that climbing is not the sole Washoe concern at Cave Rock, rather all non-Washoe (or even human) presence at Cave Rock is a negative impact.

Meeting #3, March 17, 1998
6:30 to 9pm, Nevada State Library and Archives Building, Carson City, NV

The purpose of the third meeting was to develop possible management options. Climbers came to this meeting with a fully developed "Climbers' Alternative" for Cave Rock. Forest Supervisor, Juan Palma, addressed the group and thanked them for attending and working at the meetings. He stated that he had not yet made a decision about the management of the Cave Rock area, and that he was willing to make a decision anywhere along the continuum of options, including those that could affect the traditional cultural property.

During the previous meetings, work at the tables had been interrupted with questions about what climbing is, the equipment used, etc. The Forest Service felt that there was a need to provide information about climbing to bring participants to basic level of understanding about climbing equipment, techniques, etc. Marty Hornick, Inyo National Forest climbing-recreation specialist, gave a brief overview of the various climbing activities and brought examples of types of equipment used (anchors, carabiners, removable protection, climbing shoes, chalk, etc.).

During the break after the climbing presentation, a number of Washoe tribal members left the room and held a meeting in the foyer of the building. It appeared that they were offended by the climbing presentation, and felt that the "climbers" were just given an opportunity to talk about their "side" and the Washoe were not given that opportunity. After the Washoe talked for about 20 minutes, they came back to the meeting, and it was decided that the Chairman of the Washoe tribe should be given an opportunity to speak. Brian Wallace spoke for about 20 minutes about how difficult it was for the Washoe to even be here, let alone asked to compromise their cultural values. A large group discussion took place after Wallace spoke. Discussion topics from the participants included: It seems like the Washoe are not willing to even try to come to come agreement, they will not settle for anything less than "no presence" at Cave Rock; Climbers consider Cave Rock to be sacred to them - they have spiritual experience when climbing on it - why can't the Washoe accept the climber's connection to the rock.

At the end of the meeting, the group was asked if they were interested in attending another meeting to work on possible management options. By a show of hands, the majority of the climbers and one Washoe person were willing to return.

Meeting #4, April 9, 1998
6:00 to 8:30pm, Kahle Community Center, Stateline NV

The primary purpose and focused effort for this meeting was to brainstorm management options for Cave Rock and get feedback from the group on those ideas. The Forest Service would also summarize the next steps in the Cave Rock planning process, and give representatives from the Washoe tribe and the climbing community a chance to say a few words about the process. Unlike the indication given at the last meeting, the attendees (approximately 30) were once again a mixed group.

It was made clear that our job as the collaborative group to give the Forest Supervisor information that would help him make the best decision possible about the management of Cave Rock. Participants were again asked to sit in mixed groups, and the first assignment was to brainstorm all possible management options or ideas. After the brainstorm, the groups were instructed to chose the table's top five ideas. These ideas were presented by a representative from each of the tables, and then they were taped to the wall. After all of the presentations, the entire group was given time to get up, review the ideas, and write their comments and feedback directly on the paper on which the idea was written.

The options developed and included:

The Climbers' Proposal: Climbers allowed access in keeping with the changes they proposed in the notes from their meeting (handout, attached). Including: sanitary facilities, no new bolts, "respectful" use, change route names, camouflage bolts, education, etc.

Education: *a.* Develop "Climbing Ethics" for Cave Rock, guiding conduct such as waste disposal, general behavior, route names, graffiti, chalk use, bolt maintenance, and including concrete removal; *b.* No closure or limitations for climbers. But set up of signing and educational materials to be disseminated among climbers. Have an agreement that climbers will vacate if a Washoe elder shows up to do ceremony; *c.* Education - at the area itself, in magazine articles, etc.; *d.* Education and Sensitivity - use of other media, use of permits, compromise from all sides.

Separate users: *a.* Divide area into compartments. Determine which ones are important to each group. Restrict use in some - open others. Time and/or space. *b.* Climbers have their space (cave over road), Washoe have their space. Signing indicating not to go any further.

No expansion of climbing; mask hardware: *a.* No new bolts, routes, or increased area for climbing; *b.* Camouflage/make existing hardware less obtrusive.

Limited access: *OPTION #1: a.* Close Cave Rock during portions of the year to allow for spiritual access and allow rock to recover. *b.* Time limit (certain hours of the day, certain times of the year)...when it's reasonable. *c.* Access - climbers leave if Washoe member requests. Seasonal access.
OPTION #2: Always closed to climbers except on posted days.
OPTION #3: Allow solo free climbing only (no gear) along with other equipment assisted uses. Increase public awareness of area with signs and educational awareness.

Exclusive Washoe Use: *OPTION #1: a.* Recognize cave as a historic Washoe sacred site with exclusive access by Washoe tribe for specific ceremonies. Post as a sacred site have with conduct requirements. Include an educational facility set up and run by the Washoe. Set up a regulatory commission set up. *b.* Immediate withdrawal of all non-Washoe use. *c.* Close Cave Rock to all recreational access.
OPTION #2: Close Cave Rock to climbers, because climbers' actions "specifically" desecrate the site.

Permit System: *a.* Permit quota system with education as a part of it. *b.* Access to site by permit and date (controlled access). Fees to go to maintenance and development of educational center, signing and regulatory personnel.

Phase out climbing: *a.* Moratorium date - before date climbing allowed; after date, no climbing. *b.* Phase out all non-Washoe use over time.

Create or develop another climbing site: *a.* U.S.F.S. to create another climbing site that is equally challenging. *b.* Create a climbing facility that rivals the challenge, etc., of Cave Rock for climbers in the Tahoe Basin. *c.* Blend nature and technology in a dual purpose facility. *d.* Enhance, promote, or re-create similar climbing opportunity in other parts of Basin.

Interim strategy (instead of long-term): No final decision now; rather, ongoing re-evaluation of rock "use" with education, interim time period of a limited use, continued access based on respectful, low impact use. Meanwhile, have an education program put into place and monitored, see what happens as a result of education. Concessions needed from both sides for the time being.

Other Options:
OPTION: Create responsible management - non-profit or joint power authority, represent all user groups.
OPTION: Transfer of lands from Forest Service to Washoe Tribe.
OPTION: Small groups be given a chance to meet separately from the Forest Service-sponsored meetings. Sweats?
OPTION: Check other area guidelines - Devil's Tower, Mt. Shasta, etc.

After the table group work, Terry Lilienfield, a representative from the climbing community, was invited to comment. She said that the climbers would like to work with the Washoe Tribe and the Forest Service to find solutions that can enable climbing to continue. Climbers have gained insights from the series of discussion sessions.

The Washoe Tribal Chair, Brian Wallace, was also invited to speak, and he said that he had mixed emotions about the discussion session platform, that he appreciated the education opportunity to build awareness, and that there is also has sadness because there is more work to do to build understanding about the Tribe's place at Lake Tahoe. He stated that although the discussion sessions have increased understanding, the Tribe's position has not changed. The tribe still wants to restrict use of Cave Rock, and that Cave Rock is too important to compromise with; that is asking too much of the Washoe people. The Washoe people are not interested in access, but rather the integrity of the site.

Juan Palma closed the meeting by stating that he has not yet made a decision, but he would at the right time. He stated that the collaborative effort has been a positive experience to learn viewpoints and listen to all sides. He

said he values the collaboration effort and does not want to cut it off artificially and force a decision, just to meet timeliness. Consequently, he said he was willing to delay starting the formal planning process to allow the small group meetings, not sponsored by the Forest Service, to proceed over the next month. He wants to allow the time needed to talk. He said that the Forest Service will sponsor one additional collaboration session in May, at which the people who chose to attend separate meeting can report back. We can then coalesce ideas. He concluded that he believed that the list of options created at this meeting is a realm of possibilities he can work with.

After the meeting, a list was compiled of people who agreed to share their names and a way to reach them to participate in non-Forest Service sponsored meetings over the next month.

Meeting #5, May 27, 1998
6:30 to 9:00pm, Valhalla, South Lake Tahoe, CA

The purpose of this meeting was to provide opportunity for the public give feedback on their informal gatherings since the April 9th meeting and to formally close the collaboration section of the Cave Rock planning effort. Also scheduled for the evening were updates on the land survey results and biological report, and presentation and explanation of the next step of the Cave Rock planning effort.

Participants reported that no meetings took place as planned. The list of interested people compiled at the April 9th meeting contained only two non-climbers.

The meeting provided an opportunity for people to have a last chance to express themselves in a mixed audience format. Additional feedback and thoughts expressed included:

The climbers were asked by other audience members if they would remove the concrete in the cave, and the climbers said yes. There was discussion about the fact that removing the concrete would be considered an undertaking that the Forest Service would have to address (specifically, how it impacts Cave Rock as an archaeological site). It was suggested that removal of the concrete may disturb any artifacts beneath it. On the other hand, the presence of the concrete may even protect the artifacts that may be present.

The climbers asked for feedback from the Washoe on their 3/12/98 proposal. The Washoe offered comments such as: Climbers should stay off the rock and let the Washoe have their place; Nevada Department of Transportation should remove the concrete; only certain Washoe should be able to access Cave Rock until Juan makes a decision; all man-made graffiti should come out. An elder stated that anything that is Indian, other people want. She continued that people should let Indians have their spots, like the non-Indians have theirs; Indians are hanging on to everything they have. She said that Indians did not have a voice to argue when the tunnels and road were built. For the Washoe, fighting for sacred spots is like talking in the wind. She finished by saying that people should consider and respect Washoe and other tribes' feelings.

One climber spoke about how the climbers have an opportunity to give something to the Washoe by not climbing at Cave Rock.

A member of the Washoe tribe stated that all climbing, and especially climbing by women, at Cave Rock is a big desecration. According to this person, women were not traditionally allowed at Cave Rock.

Juan closed the meeting and the collaboration process. He stated that the decision would be a difficult one and that it was important for all to consider the humanity of others.

SUMMARY AND CONCLUSION

The information gathered over the course of these five meetings, specifically the issues and the possible management options, were instrumental in the development of the proposed action. The meetings provided a forum for bringing out those issues that were core to the desires and needs of both Washoes and climbers.

The general process and purpose of this collaboration effort was very clear at the beginning in January, and there were some ideas about the positions and attitudes the public participants would take. The unknowns were how committed the participants would be to the effort and process, and how much they would be work toward finding common ground and developing ideas for resolution for the issues. The understanding of these unknowns was by far the most impressive part of this collaborative effort. That both climbers and Washoe would return to the table meeting after meeting in spite of their various levels of hope or frustration with the others was remarkable. Even after it became clear that the Washoe would and could not compromise their fundamental belief that any non-Washoe presence desecrates Cave Rock, the Washoe continued to attend meetings and give feedback. At the same time, the climbers, realizing that the Washoe did not plan to move from their position, continued to work with the Washoe to move toward some closer place between the two ends of the use spectrum. Both Washoe and climbers listened respectfully to the feelings desires of the participants, even when the words being said were not respectful.

There was no consensus between the climbers and the Washoe. The desires of both groups conflicted with each other, and it was clear that no amount of dialog would change that. However, the Cave Rock collaboration effort was a success in that the participants had the commitment to the resource and their interest in it to speak up and share their believes and desires, and to work hard to make the most out of each meeting. Those who worked through these five meetings walked away with a greater understanding of the complexity and diversity of interests at Cave Rock.

(end)

Appendix B
Comments to the Cave Rock DEIS

Collection of Letters

In the printed version of the Cave Rock Management Direction, Final Environmental Impact Statement from the Lake Tahoe Basin Management Unit (LTBMU), this section contains 22 pages of letters and comments the LTBMU received in making this decision. If you would like copies of these documents, please contact John Maher by phone at: (530)573-2671, via email at: jmaher@fs.fed.us or you can mail your request to:

Lake Tahoe Basin Management Unit
Attention: John Maher
870 Emerald Bay Road, Suite #1
South Lake Tahoe, CA 96150

(end)